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THE FIRST MEN IN THE MOON

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THE FIRST MEN IN THE MOON
THE WORLD SET FREE

and

SHORT STORIES

by

H. G. WELLS

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THE FIRST MEN IN THE MOON

"Three thousand stadia from the earth to the moon. . . . Marvel not, my comrade, if I appear talking to you on super-terrestrial and aerial topics. The long and the short of the matter is that I am running over the order of a Journey I have lately made."—LUCIAN'S *ICAROMENIPPUS.*

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CHAPTER ONE

MR. BEDFORD MEETS MR. CAVOR AT LYMPNE

As I sit down to write here amidst the shadows of vine-leaves under the blue sky of southern Italy it comes to me with a certain quality of astonishment that my participation in these amazing adventures of Mr. Cavor was, after all, the outcome of the purest accident. It might have been any one. I fell into these things at a time when I thought myself removed from the slightest possibility of disturbing experiences. I had gone to Lympne because I had imagined it the most uneventful place in the world. "Here at any rate," said I, "I shall find peace and a chance to work!"

And this book is the sequel. So utterly at variance is Destiny with all the little plans of men.

I may perhaps mention here that very recently I had come an ugly cropper in certain business enterprises. At the present moment, surrounded by all the circumstances of wealth, there is a luxury in admitting my extremity. I can even admit that to a certain extent my disasters were conceivably of my own making. It may be there are directions in which I have some capacity; the conduct of business operations is not among these. But in those days I was young, and my youth, among other objectionable forms, took that of a pride in my capacity for affairs. I am young still in years, but the things that have happened to me have rubbed something of the youth from my mind. Whether they have brought any wisdom to light below it, is a more doubtful matter.

It is scarcely necessary to go into the details of the speculations that landed me at Lympne in Kent. Nowadays even about business transactions there is a strong spice of adventure. I took risks. In these things there is invariably a certain amount to give and take, and it fell to me finally to do the giving, reluctantly enough. Even when I had got out of everything one cantankerous creditor saw fit to be malignant. Perhaps you have met that flaming sense of outraged virtue or perhaps you have only felt it. He ran me hard. It seemed to me at last that there was nothing for it but to write a play, unless I wanted to drudge for my living as a clerk. I have a certain imagination, and luxurious tastes, and I meant to make a vigorous fight for it before that fate overtook me. In addition to my belief in my powers as a business man I had always in those days had an idea that I was equal to writing a very good play. It is not, I believe, an uncommon persuasion. I knew there was nothing a man can do outside legitimate business transactions that has such opulent possibilities, and very probably that biased my opinion. I had

He stared. "One moment," he said, "certainly. Or if you wish to speak to me for longer, and it is not asking too much—your moment is up—would it trouble you to accompany me——?"

"Not in the least," said I, placing myself beside him.

"My habits are regular. My time for intercourse—limited."

"This, I presume, is your time for exercise?"

"It is. I come here to enjoy the sunset."

"You don't."

"Sir?"

"You never look at it."

"Never look at it?"

"No. I've watched you thirteen nights and not once have you looked at the sunset. Not once."

He knitted his brows like one who encounters a problem.

"Well, I enjoy the sunlight—the atmosphere. I go along this path, through that gate"—he jerked his head over his shoulder—"and round——"

"You don't. You never have been. It's all nonsense. There isn't a way. To-night for instance——"

"Oh! to-night! Let me see. Ah! I just glanced at my watch, saw that I had already been out just three minutes over the precise half-hour, decided there was not time to go round, turned——"

"You always do."

He looked at me, reflected. "Perhaps I do—now I come to think of it. . . . But what was it you wanted to speak to me about?"

"Why—*this!*"

"This?"

"Yes. Why do you do it? Every night you come making a noise——"

"Making a noise?"

"Like this." I imitated his buzzing noise. He looked at me and it was evident the buzzing awakened distaste. "Do I do *that*?" he asked.

"Every blessed evening."

"I had no idea."

He stopped. He regarded me gravely. "Can it be," he said, "that I have formed a habit?"

"Well, it looks like it. Doesn't it?"

He pulled down his lower lip between finger and thumb. He regarded a puddle at his feet.

"My mind is much occupied," he said. "And you want to know why! Well, sir, I can assure you that not only do I not know why I do these things, but I did not even know I did them. Come to think, it is just as you say; I never *have* been beyond that field. . . . And these things annoy you?"

For some reason I was beginning to relent towards him.

"Not annoy," I said. "But—imagine yourself writing a play!"

"I couldn't."

"Well, anything that needs concentration."

"Ah," he said, "of course," and meditated. His expression became so eloquent of distress that I relented still more. After all there is a touch of aggression in demanding, of a man you don't know, why he hums on a public footpath.

"You see," he said weakly, "it's a habit."

"Oh, I recognise that."

"I must stop it."

"But not if it puts you out. After all, I had no business—it's something of a liberty."

"Not at all, sir," he said, "not at all. I am greatly indebted to you. I should guard myself against these things. In future I will. Could I trouble you—once again? that noise?"

"Something like this," I said. "Zuzzoo, zuzzoo—— But really you know——"

"I am greatly obliged to you. In fact—I know—I am getting absurdly absent-minded. You are quite justified, sir—perfectly justified. Indeed, I am indebted to you. The thing shall end. And now, sir, I have already brought you farther than I should have done."

"I do hope my impertinence——"

"Not at all, sir, not at all."

We regarded each other for a moment. I raised my hat and wished him a good evening. He responded convulsively, and so we went our ways.

At the stile I looked back at his receding figure. His bearing had changed remarkably; he seemed limp, shrunken. The contrast with his former gesticulating, zuzzooing self took me in some absurd way as pathetic. I watched him out of sight. Then, wishing very heartily I had kept to my own business, I returned to my bungalow and my play.

The next evening I saw nothing of him, nor the next. But he was very much in my mind, and it had occurred to me that as a sentimental comic character he might serve a useful purpose in the development of my plot. The third day he called upon me.

For a time I was puzzled to think what had brought him—he made indifferent conversation in the most formal way—then abruptly he came to business. He wanted to buy me out of my bungalow.

"You see," he said, "I don't blame you in the least, but you've destroyed a habit and it disorganises my day. I've walked past here for years—years. No doubt I've hummed. . . . You've made all that impossible!"

I suggested he might try some other direction.

"No. There is no other direction. This is the only one.

I've inquired. And now every afternoon at four—I come to a dead wall."

"But, my dear sir, if the thing is so important to you——"

"It's vital! You see I'm—I'm an investigator—I am engaged in a scientific research. I live——" He paused and seemed to think. "Just over there," he said, and pointed suddenly dangerously near my eye. "The house with white chimneys you see just over the trees. And my circumstances are abnormal—abnormal. I am on the point of completing one of the most important demonstrations, I can assure you, one of the most important of all the demonstrations that have ever been made. It requires constant thought, constant mental ease and activity. And the afternoon was my brightest time!—effervescing with new ideas—new points of view."

"But why not come by still?"

"It would be all different. I should be self-conscious. I should think of you at your play—watching me, irritated! Instead of thinking of my work. No! I must have the bungalow."

I meditated. Naturally, I wanted to think the matter over thoroughly before anything decisive was said. I was generally ready enough for business in those days and selling always attracted me, but in the first place it was not my bungalow, and even if I sold it to him at a good price I might get inconvenienced in the delivery if the current owner got wind of the transaction, and in the second I was, well—undischarged. It was clearly a business that required delicate handling. Moreover the possibility of his being in pursuit of some valuable invention also interested me. It occurred to me that I would like to know more of this research, not with any dishonest intention, but simply with an idea that to know what it was would be a relief from play-writing. I threw out feelers.

He was quite willing to supply information. Indeed, once he was fairly under way the conversation became a monologue. He talked like a man long pent up, who has had it over with himself again and again. He talked for nearly an hour, and I must confess I found it a pretty stiff bit of listening. But through it all there was the undertone of satisfaction one feels when one is neglecting work one has set oneself. During that first interview I gathered very little of the drift of his work. Half his words were technicalities entirely strange to me, and he illustrated one or two points with what he was pleased to call elementary mathematics, computing on an envelope with a copying-ink pencil, in a manner that made it hard even to seem to understand. "Yes," I said. "Yes. Go on!" Nevertheless I made out enough to convince me that he was no mere crank playing at discoveries. In spite of his crank-like appearance there was a force about him that made that impossible. Whatever it was it was a thing with mechanical possibilities. He told me of a workshed he had

and of three assistants, originally jobbing carpenters whom he had trained. Now from the workshed to the patent office is clearly only one step. He invited me to see these things. I accepted readily and took care by a remark or so to underline that. The proposed transfer of the bungalow remained very conveniently in suspense.

At last he rose to depart with an apology for the length of his call. Talking over his work was, he said, a pleasure enjoyed only too rarely. It was not often he found such an intelligent listener as myself. He mingled very little with professional scientific men.

"So much pettiness," he explained, "so much intrigue! And really when one has an idea—a novel, fertilising idea—I don't wish to be uncharitable, but——"

I am a man who believes in impulses. I made what was perhaps a rash proposition. But you must remember that I had been alone, playwriting in Lympne for fourteen days, and my compunction for his ruined walk still hung about me. "Why not," said I, "make this your new habit? In the place of the one I spoilt. At least—until we can settle about the bungalow. What you want is to turn over your work in your mind. That you have always done during your afternoon walk. Unfortunately that's over—you can't get things back as they were. But why not come and talk about your work to me—use me as a sort of wall against which you may throw your thoughts and catch them again. It's certain I don't know enough to steal your ideas myself, and I know no scientific men. . . ."

I stopped. He was considering. Evidently the thing attracted him. "But I'm afraid I should bore you," he said.

"You think I'm too dull?"

"Oh no, but technicalities——"

"Anyhow you've interested me immensely this afternoon."

"Of course, it *would* be a great help to me. Nothing clears up one's ideas so much as explaining them. Hitherto——"

"My dear sir, say no more."

"But really can you spare the time?"

"There is no rest like change of occupation," I said with profound conviction.

The affair was over. On my veranda steps he turned. "I am already greatly indebted to you," he said.

I made an interrogative noise.

"You have completely cured me of that ridiculous habit of humming," he explained.

I think I said I was glad to be of any service to him, and he turned away.

Immediately the train of thought that our conversation had suggested must have resumed its sway. His arms began to wave in their former fashion. The faint echo of "*zuzzoo*" came back to me on the breeze. . . .

Well—after all that was not my affair. . . .

He came the next day and again the next day after that, and delivered two lectures on physics to our mutual satisfaction. He talked with an air of being extremely lucid about the "ether" and "tubes of force" and "gravitational potential" and such things, and I sat in my other folding-chair and said "Yes," "Go on," "I follow you," to keep him going. It was tremendously difficult stuff, but I do not think he ever suspected how much I did not understand him. There were moments when I doubted whether I was well employed, but at any rate I was resting from that confounded play. Now and then things gleamed on me clearly for a space, only to vanish just when I thought I had hold of them. Sometimes my attention failed altogether, and I would give it up and sit and stare at him, wondering whether after all it would not be better to use him as a central figure in a good farce and let all this other stuff slide. And then perhaps I would comprehend again for a bit.

At the earliest opportunity I went to see his house. It was large and carelessly furnished; there were no servants other than his three assistants, and his dietary and private life were characterised by a philosophical simplicity. He was a water-drinker, a vegetarian, and all those logical, disciplinary things. But the sight of his equipment settled many doubts. It looked like business from cellar to attic—an amazing little place to find in an out-of-the-way village. The ground-floor rooms contained benches and apparatus, the bakehouse and scullery boiler had developed into respectable furnaces, dynamos occupied the cellar, and there was a gasometer in the garden. He showed it to me with all the confiding zest of a man who has been living too much alone. His seclusion was overflowing now in an excess of confidence, and I had the good luck to be the recipient.

The three assistants were creditable specimens of the class of "handy men" from which they came. Conscientious if unintelligent, strong, civil, and willing. One, Spargus, who did the cooking and all the metal work, had been a sailor; a second, Gibbs, was a joiner, and the third was an ex-jobbing gardener and now general assistant. They were the merest labourers; all the intelligent work was done by Cavor. Theirs was the darkest ignorance compared even with my muddled impression.

And now, as to the nature of these inquiries. Here unhappily comes a grave difficulty. I am no scientific expert, and if I were to attempt to set forth in the highly scientific language of Mr. Cavor the aim to which his experiments tended, I am afraid I should confuse not only the reader but myself, and almost certainly I should make some blunder that would bring upon me the mockery of every up-to-date student of mathematical physics in the country. The best thing I

can do therefore is, I think, to give my impressions in my own inexact language, without any attempt to wear a garment of knowledge to which I have no claim.

The object of Mr. Cavor's search was a substance that should be "opaque"—he used some other word I have forgotten, but "opaque" conveys the idea—to "all forms of radiant energy." "Radiant energy," he made me understand, was anything like light or heat or those Röntgen rays there was so much talk about a year or so ago, or the electric waves of Marconi, or gravitation. All these things, he said, *radiate* from centres and act on bodies at a distance, whence comes the term "radiant energy." Now almost all substances are opaque to some form or other of radiant energy. Glass, for example, is transparent to light, but much less so to heat, so that it is useful as a fire-screen; and alum is transparent to light, but blocks heat completely. A solution of iodine in carbon bisulphide, on the other hand, completely blocks light but is quite transparent to heat. It will hide a fire from you but permit all its warmth to reach you. Metals are not only opaque to light and heat but also to electrical energy, which passes through both iodine solution and glass almost as though they were not interposed. And so on.

Now all known substances are "transparent" to gravitation. You can use screens of various sorts to cut off the light or heat or electrical influence of the sun, or the warmth of the earth from anything; you can screen things by sheets of metal from Marconi's rays, but nothing will cut off the gravitational attraction of the sun or the gravitational attraction of the earth. Yet why there should be nothing is hard to say. Cavor did not see why such a substance should not exist, and certainly I could not tell him. I had never thought of such a possibility before. He showed me by calculations on paper which Lord Kelvin, no doubt, or Professor Lodge or Professor Karl Pearson, or any of those great scientific people might have understood, but which simply reduced me to a hopeless muddle, that not only was such a substance possible, but that it must satisfy certain conditions. It was an amazing piece of reasoning. Much as it amazed and exercised me at the time, it would be impossible to reproduce it here. "Yes," I said to it all, "yes. Go on!" Suffice it for this story that he believed he might be able to manufacture this possible substance opaque to gravitation out of a complicated alloy of metals and something new—a new element I fancy—called, I believe, *helium*, which was sent to him from London in sealed stone jars. Doubt has been thrown upon this detail, but I am almost certain it was *helium* he had sent him in sealed stone jars. It was certainly something very gaseous and thin.

If only I had taken notes. . . .

But then how was I to foresee the necessity of taking notes?

Any one with the merest germ of imagination will understand the extraordinary possibilities of such a substance, and will sympathise a little with the emotion I felt as this understanding emerged from the haze of abstruse phrases in which Cavor expressed himself. Comic relief in a play indeed! It was some time before I would believe that I had interpreted him aright, and I was very careful not to ask questions that would have enabled him to gauge the profundity of misunderstanding into which he dropped his daily exposition. But no one reading the story of it here will sympathise fully, because from my barren narrative it will be impossible to gather the strength of my conviction that this astonishing substance was positively going to be made.

I do not recall that I gave my play an hour's work at any one time after my visit to his house. My imagination had other things to do. There seemed no limit to the possibilities of the scheme; whichever way I tried, I came on miracles and revolutions. For example, if one wanted to lift a weight, however enormous, one had only to get a sheet of this substance beneath it and one might lift it with a straw. My first natural impulse was to apply this principle to guns and ironclads and all the material and methods of war and from that to shipping, locomotion, building, every conceivable form of human industry. The chance that had brought me into the very birth chamber of this new time—it was an epoch, no less—was one of those chances that come once in a thousand years. The thing unrolled, it expanded and expanded. Among other things I saw in it my redemption as a business man. I saw a parent company and daughter companies, applications to right of us, applications to left, rings and trusts, privileges and concessions spreading and spreading, until one vast stupendous Cavorite Company ran and ruled the world.

And I was in it.

I took my line straight away. I knew I was staking everything, but I jumped there and then.

"We're on absolutely the biggest thing that has ever been invented," I said, and put the accent on "we." "If you want to keep me out of this, you'll have to do it with a gun. I'm coming down to be your fourth labourer to-morrow."

He seemed surprised at my enthusiasm, but not a bit suspicious or hostile. Rather he was self-depreciatory.

He looked at me doubtfully. "But do you really think—— ?" he said. "And your play! How about that play ?"

"It's vanished!" I cried. "My dear sir, don't you see what you've got ? Don't you see what you're going to do ?"

That was merely a rhetorical turn, but positively he didn't. At first I could not believe it. He had not had the beginning of the inkling of an idea! This astonishing little man had

been working on purely theoretical grounds the whole time! When he said it was "the most important" research the world had ever seen he simply meant it squared up so many theories, settled so much that was in doubt; he had troubled no more about the application of the stuff he was going to turn out than if he had been a machine that makes guns. This was a possible substance, and he was going to make it! *V'là tout*, as the Frenchman says.

Beyond that—he was childish! If he made it, it would go down to posterity as Cavorite or Cavorine and he would be made an F.R.S. and his portrait as a scientific worthy given away with *Nature*, and things like that. And that was all he saw! He would have dropped this bombshell into the world as though he had discovered a new species of gnat, if it had not happened that I had come along. And there it would have lain and fizzled, like one or two other little things these scientific people have lit and dropped about.

When I realised this, it was I did the talking and Cavor who said "Go on!" I jumped up. I paced the room, gesticulating like a boy of twenty. I tried to make him understand his duties and responsibilities in the matter—*our* duties and responsibilities in the matter. I assured him we might make wealth enough to work any sort of social revolution we fancied; we might own and order the whole world. I told him of companies and patents and the case for secret processes. All these things seemed to impress him much as his mathematics had impressed me. A look of perplexity came into his ruddy little face. He stammered something about indifference to wealth, but I brushed all that aside. He had got to be rich and it was no use stammering. I gave him to understand the sort of man I was, and that I had had very considerable business experience. I did not tell him I was an undischarged bankrupt at the time, because that was temporary, but I think I reconciled my evident poverty with my financial claims. And quite insensibly in the way such projects grow, the understanding of a Cavorite monopoly grew up between us. He was to make the stuff and I was to make the boom.

I stuck like a leech to the "we"—"you" and "I" didn't exist for me.

His idea was that the profits I spoke of might go to endow research, but that of course was a matter we had to settle later. "That's all right," I shouted. "That's all right." The great point, as I insisted, was to get the thing done.

"Here is a substance," I cried, "no home, no factory, no fortress, no ship can dare to be without—more universally applicable even than a patent medicine! There isn't a solitary aspect of it, not one of its ten thousand possible uses, that will not make us rich, Cavor, beyond the dreams of avarice!"

"No!" he said. "I begin to see. It's extraordinary how one gets new points of view by talking over things!"

"And as it happens you have talked to just the right man!"

"I suppose no one," he said, "is absolutely *averse* to enormous wealth. Of course there is one thing——"

He paused. I stood still.

"It is just possible, you know, that we may not be able to make it after all. It may be one of those things that are a theoretical possibility but a practical absurdity. Or when we make it, there may be some little hitch——!"

"We'll tackle the hitch when it comes," said I.

CHAPTER TWO

THE FIRST MAKING OF CAVORITE

But Cavor's fears were groundless so far as the actual making was concerned. On the fourteenth of October, 1899, this incredible substance was made.

Oddly enough it was made at last by accident when Mr. Cavor least expected it. He had fused together a number of metals and certain other things—I wish I knew the particulars now—and he intended to leave the mixture a week and then allow it to cool slowly. Unless he had miscalculated, the last stage in the combination would occur when the stuff sank to a temperature of sixty degrees Fahrenheit. But it chanced that, unknown to Cavor, dissension had arisen among the men about the furnace-tending. Gibbs, who had previously seen to this, had suddenly attempted to shift it to the man who had been a gardener, on the score that coal was soil, being dug, and therefore could not possibly fall within the province of a joiner ; the man who had been a jobbing gardener alleged, however, that coal was a metallic or ore-like substance, let alone that he was cook. But Spargus insisted on Gibbs doing the coaling, seeing that he was a joiner and that coal is notoriously fossil wood. Consequently Gibbs ceased to replenish the furnace and no one else did so, and Cavor was too much immersed in certain interesting problems concerning a Cavorite flying machine (neglecting the resistance of the air and one or two other points) to perceive that anything was wrong. And the premature birth of his invention took place just as he was coming across the field to my bungalow for our afternoon talk and tea.

I remember the occasion with extreme vividness. The water was boiling and everything was prepared and the sound of his " zuzzoo " had brought me out upon the veranda. His active little figure was black against the autumnal sunset, and to the right the chimneys of his house just rose above a gloriously tinted group of trees. Remoter rose the Wealden Hills, faint and blue, while to the left the hazy marsh spread out spacious and serene. And then—— !

The chimneys jerked heavenward, smashing into a string of bricks as they rose, and the roof and a miscellany of furniture followed. Then overtaking them came a huge white flame. The trees about the building swayed and whirled and tore themselves to pieces that sprang towards the flare. My ears were smitten with a clap of thunder that left me deaf on one side for life, and all about me windows smashed unheeded.

I took three steps from the veranda towards Cavor's house, and even as I did so came the wind.

Instantly my coat tails were over my head and I was pro-

gressing in great leaps and bounds and quite against my will, towards him. In the same moment the discoverer was seized, whirled about, and blown through the screaming air. I saw one of my chimney pots hit the ground within six yards of me, leap a score of feet, and so hurry in great strides towards the focus of the disturbance. Cavor, kicking and flapping, came down again, rolled over and over on the ground for a space, struggled up and was lifted and borne forward at an enormous velocity, vanishing at last among the labouring, lashing trees that writhed about his house.

A mass of smoke and ashes and a square bluish shining substance rushed up towards the zenith. A large fragment of fencing came sailing past me, dropped edgewise, hit the ground and fell flat, and then the worst was over. The aerial commotion fell swiftly until it was merely a strong gale, and I became once more aware that I had breath and feet. By leaning back against the wind I managed to stop, and could collect such wits as still remained to me.

In that instant the whole face of the world had changed. The tranquil sunset had vanished, the sky was dark with scurrying clouds, everything was flattened and swaying with the gale. I glanced back to see if my bungalow was still in a general way standing, then staggered forward towards the trees among which Cavor had vanished and through whose tall and leaf-denuded branches shone the flames of his burning house.

I entered the copse, dashing from one tree to another and clinging to them, and for a space I sought him in vain. Then amidst a heap of smashed branches and fencing that had banked itself against a portion of his garden wall, I perceived something stir. I made a run for this, but before I reached it a brown object separated itself, rose on two muddy legs and protruded two drooping, bleeding hands. Some tattered ends of garment fluttered out from its middle portion and streamed before the wind.

For a moment I did not recognise this earthly lump, and then I saw that it was Cavor, caked in the mud in which he had rolled. He leaned forward against the wind, rubbing the dirt from his eyes and mouth.

He extended a muddy lump of hand, and staggered a pace towards me. His face worked with emotion ; little lumps of mud kept falling from it. He looked as damaged and pitiful as any living creature I have ever seen, and his remark therefore amazed me exceedingly. "'Gratulate me," he gasped ; "'gratulate me!"

"Congratulate you!" said I. "Good heavens! What for?"

"I've done it."

"You *have*. What on earth caused that explosion?"

A gust of wind blew his words away. I understood him

to say that it wasn't an explosion at all. The wind hurled me into collision with him, and we stood clinging to each other.

"Try to get back to my bungalow," I bawled in his ear. He did not hear me, and shouted something about "three martyrs—science," and also something about "not much good." At the time he laboured under the impression that his three attendants had perished in this whirlwind. Happily this was incorrect. As soon as he had left for my bungalow they had gone off to the public-house in Lympne, to discuss the question of the furnaces over some trivial refreshment.

I repeated my suggestion of getting back to my bungalow, and this time he understood. We clung arm in arm and started, managing at last to reach the shelter of as much roof as was left to me. For a space we sat in armchairs and panted. All the windows were broken and the lighter articles of furniture were in great disorder, but no irrevocable damage was done. Happily the kitchen door had stood the pressure upon it, so that all my crockery and cooking materials had escaped damage. The oil-stove was still burning and I put on the water to boil again for tea. That prepared, I could turn to Cavor for his explanation.

"Quite correct," he insisted; "quite correct. I've done it, and it's all right."

"But——" I protested. "All right! Why, there can't be a rick standing, or a fence or a thatched roof undamaged for twenty miles round. . . ."

"It's all right—*really*. I didn't, of course, foresee this little upset. My mind was preoccupied with another problem, and I'm apt to disregard these practical side issues. But it's all right——"

"My dear sir," I cried, "don't you see you've done thousands of pounds' worth of damage?"

"There, I throw myself on your discretion. I'm not a practical man, of course, but don't you think they will regard it as a cyclone——"

"But the explosion——"

"It was not an explosion. It's perfectly simple. Only, as I say, I'm apt to overlook these little things. It's that zuzzoo business on a larger scale. Inadvertently I made this substance of mine, this Cavorite, in a thin wide sheet. . . ."

He paused. "You are quite clear that the stuff is opaque to gravitation, that it cuts off objects from gravitating towards each other?"

"Yes," said I. "Yes?"

"Well, so soon as it reached a temperature of sixty degrees Fahrenheit and the process of its manufacture was complete, the air above it, the portions of roof and ceiling and floor above it ceased to have weight. I suppose you know—everybody knows nowadays—that, as a usual thing, the air *has* weight, that it presses on everything at the surface of the

earth, presses in all directions, with a pressure of fourteen and a half pounds to the square inch ? "

"I know that," said I. "Go on."

"I know that too," he remarked. "Only this shows you how useless knowledge is unless you apply it. You see, over our Cavorite this ceased to be the case, the air there ceased to exert any pressure, and the air round it, and not over the Cavorite, was exerting a pressure of fourteen pounds and a half to the square inch upon this suddenly weightless air. Ah ! you begin to see ! The air all about the Cavorite crushed in upon the air above it with irresistible force. The air above the Cavorite was forced upwards violently, the air that rushed in to replace it immediately lost weight, ceased to exert any pressure, followed suit, blew the ceiling through and the roof off. . . .

"You perceive," he said, "it formed a sort of atmospheric fountain, a kind of chimney in the atmosphere. And if the Cavorite itself hadn't been loose and so got sucked up the chimney, does it occur to you what would have happened ? "

I thought. "I suppose," I said, "the air would be rushing up and up over that infernal piece of stuff now."

"Precisely," he said. "A huge fountain ! "

"Spouting into space ! Good heavens ! Why, it would have squirted all the atmosphere of the earth away ! It would have robbed the world of air ! It would have been the death of all mankind ! That little lump of stuff ! "

"Not exactly into space," said Cavor, "but as bad—practically. It would have whipped the air off the world as one peels a banana, and flung it thousands of miles. It would have dropped back again of course—but on an asphyxiated world ! From our point of view very little better than if it never came back ! "

I stared. As yet I was too amazed to realise how all my expectations had been upset. "What do you mean to do now ? " I asked.

"In the first place, if I may borrow a garden trowel I will remove some of this earth with which I am encased, and then if I may avail myself of your domestic conveniences, I will have a bath. This done, we will converse more at leisure. It will be wise, I think "—he laid a muddy hand on my arm —"if nothing were said of this affair beyond ourselves. I know I have caused great damage—probably even dwelling-houses may be ruined here and there upon the country-side. But on the other hand, I cannot possibly pay for the damage I have done, and if the real cause of this is published it will lead only to heart-burning and the obstruction of my work. One cannot foresee everything, you know, and I cannot consent for one moment to add the burden of practical considerations to my theorising. Later on, when you have come in with your practical mind and Cavorite is floated—

floated is the word, isn't it ?—and it is has realised all you anticipate for it, we may set matters right with these people. But not now—not now. If no other explanation is offered, people, in the present unsatisfactory state of meteorological science, will ascribe all this to a cyclone : there might be a public subscription, and as my house has collapsed and been burnt I should in that case receive a considerable share in the compensation which would be extremely helpful to the prosecution of our researches. But if it is known that *I* caused this, there will be no public subscription, and everybody will be put out. Practically, I shall never get a chance of working in peace again. My three assistants may or may not have perished. That is a detail. If they have it is no great loss ; they were more zealous than able, and this premature event must be largely due to their joint neglect of the furnace. If they have not perished, I doubt if they have the intelligence to explain the affair. They will accept the cyclone story. And if during the temporary unfitness of my house for occupation, I may lodge in one of the untenanted rooms of this bungalow of yours——"

He paused and regarded me.

A man of such possibilities, I reflected, is no ordinary guest to entertain.

" Perhaps," said I, rising to my feet, " we had better begin by looking for a trowel," and I led the way to the scattered vestiges of the greenhouse.

While he was having his bath I considered the entire question alone. It was clear there were drawbacks to Mr. Cavor's society I had not foreseen. The absent-mindedness that had just escaped depopulating the terrestrial globe might at any moment result in some other grave inconvenience. On the other hand I was young, my affairs were in a mess, and I was in just the mood for reckless adventure, with a chance of something good at the end of it. I had quite settled in my mind that I was to have half at least in that aspect of the affair. Fortunately I held my bungalow, as I have already explained, on a three years' agreement, without being responsible for repairs, and my furniture, such as there was of it, had been hastily purchased, was unpaid for, insured, and altogether devoid of associations. In the end I decided to keep on with him and see the business through.

Certainly the aspect of things had changed very greatly. I no longer doubted at all the enormous possibilities of the substance, but I began to have doubts about the gun-carriage and the patent boots.

We set to work at once to reconstruct his laboratory and to proceed with our experiments. Cavor talked more on my level than he had ever done before when it came to question of how we should make the stuff next.

" Of course we must make it again," he said, with a sort

of glee I had not expected in him, "of course we must make it again. We have caught a tartar, perhaps, but we have left the theoretical behind us for good and all. If we can possibly avoid wrecking this little planet of ours we will. But—there must be risks! There must be. In experimental work there always are! And here, as a practical man, *you* must come in. For my own part, it seems to me we might make it edgewise, perhaps, and very thin. Yet I don't know—I have a certain dim perception of another method. I can hardly explain it yet. But curiously enough it came into my mind while I was rolling over and over in the mud before the wind and very doubtful how the whole adventure was to end, as being absolutely the thing I ought to have done."

Even with my aid we found some little difficulty, and meanwhile we kept at work restoring the laboratory. There was plenty to do before it was absolutely necessary to decide upon the precise form and method of our second attempt. Our only hitch was the strike of the three labourers, who objected to my activity as a foreman. But that matter we compromised after two days' delay.

CHAPTER THREE

THE BUILDING OF THE SPHERE

I REMEMBER very distinctly the occasion when Cavor told me of his idea of the sphere. He had had intimations of it before, but at the time it seemed to come to him in a rush. We were returning to the bungalow for tea, and on the way he fell humming. Suddenly he shouted: "That's it! That finishes it! A sort of roller blind."

"Finishes what?" I asked.

"Space—anywhere! The moon!"

"What do you mean?"

"Mean? Why—it must be a sphere! That's what I mean!"

I saw I was out of it, and for a time I let him talk in his own fashion. I hadn't the ghost of an idea then of his drift. But after he had taken tea he made it clear to me.

"It's like this," he said. "Last time I ran this stuff into a flat tank with an overlap that held it down. When it had cooled and the manufacture was completed, all that uproar happened; nothing above it weighed anything, the air went squirting up, the house squirted up, and if the stuff itself hadn't squirted up too, I don't know what would have happened! But suppose the substance is loose and quite free to go up?"

"It will go up at once!"

"Exactly. With no more disturbance than firing a big gun."

"But what good will that do?"

"I'm going up with it!"

I put down my teacup and stared at him.

"Imagine a sphere," he explained, "large enough to hold two people and their luggage. It will be made of steel, lined with thick glass, it will contain a proper store of solidified air, concentrated food, water, distilling apparatus and so forth, and enamelled as it were on the outer steel——"

"Cavorite?"

"Yes."

"But how will you get inside?"

"There was a similar problem about a dumpling."

"Yes, I know. But how?"

"That's perfectly easy. An air-tight manhole is all that is needed. That of course will have to be a little complicated; there will have to be a valve, so that things may be thrown out if necessary without much loss of air."

"Like Jules Verne's apparatus in *A Trip to the Moon*?"

But Cavor was not a reader of fiction.

"I begin to see," I said slowly. "And you could get in

and screw yourself up while the Cavorite was warm, and as soon as it cooled it would become impervious to gravitation, and off you would fly——"

"At a tangent."

"You would go off in a straight line——" I stopped abruptly. "What is to prevent the thing travelling in a straight line into space for ever?" I asked. "You're not sure to get anywhere, and if you do—how will you get back?"

"I've just thought of that," said Cavor. "That's what I meant when I said the thing was finished. The inner glass sphere can be air-tight and except for the manhole continuous, and the steel sphere can be made in sections, each section capable of rolling up after the fashion of a roller blind. These can easily be worked by springs, and released and checked by electricity conveyed by platinum wires fused through the glass. All that is merely a question of detail. So you see that except for the thickness of the blind rollers, the Cavorite exterior of the sphere will consist of windows or blinds, whichever you like to call them. Well, when all these windows or blinds are shut, no light, no heat, no gravitation, no radiant energy of any sort will get at the inside of the sphere; it will fly on through space in a straight line as you say. But open a window—imagine one of the windows open! Then at once any heavy body that chances to be in that direction will attract us——"

I sat taking it in.

"You see?" he said.

"Oh, I *see*."

"Practically we shall be able to tack about in space just as we wish. Get attracted by this and that."

"Oh yes. That's clear enough. Only——"

"Well?"

"I don't quite see what we shall do it for! It's really only jumping off the world and back again."

"Surely! For example! One might go to the moon."

"And when one got there! What would you find?"

"We should see——! Oh! Consider the new knowledge!"

"Is there air there?"

"There may be."

I shook my head. "It's a fine idea," I said, "but it strikes me as a large order all the same. The moon! I'd much rather try some smaller things first."

"They're out of the question—because of the air difficulty."

"Why not apply that idea of spring blinds—Cavorite blinds in strong steel cases—to lifting weights?"

"It wouldn't work," he insisted. "After all, to go into outer spaces is not so much worse, if at all, than a polar expedition. Men go on polar expeditions."

"Not business men. Besides they get paid for polar expeditions. And if anything goes wrong there are relief parties. But this—it's just firing ourselves off the world for nothing."

"Call it prospecting."

"You'll have to call it that. . . . One might make a book of it perhaps."

"I have no doubt there will be minerals," said Cavor.

"For example?"

"Oh! sulphur, ores, gold perhaps; possibly new elements."

"Cost of carriage," I said; "you know you're not a practical man. The moon's a quarter of a million miles away."

"It seems to me it wouldn't cost much to cart any weight anywhere if you packed it in a Cavorite case."

"I had not thought of that. Delivered free on head of purchaser, eh?"

"It isn't as though you were confined to the moon."

"You mean——?"

"There's Mars—clear atmosphere, novel surroundings, exhilarating sense of lightness. It might be pleasant to go there."

"Is there air on Mars?"

"Oh yes!"

"Seems as though you might run it as a sanatorium. By the way, how far is Mars?"

"Two hundred million miles at present," said Cavor airily; "and you go close by the sun."

My imagination was picking itself up again. "After all," I said, "there's something in these things. There's travel——"

An extraordinary possibility came rushing into my mind. Suddenly I saw as in a vision the whole solar system threaded with Cavorite liners and spheres *de luxe*. "Rights of pre-emption," came floating into my head—planetary rights of pre-emption. I recalled the old Spanish monopoly in American gold. It wasn't as if it was just this planet or that—it was all of them. I stared at Cavor's rubicund face and suddenly my imagination was leaping and dancing. I stood up. I walked up and down; my tongue was loosened.

"I'm beginning to take it in," I said. "I'm beginning to take it in." The transition from doubt to enthusiasm seemed to take scarcely any time at all. "But this is tremendous!" I cried; "this is imperial! I haven't been dreaming of this sort of thing."

Once the chill of my opposition was removed, his own pent-up excitement had play. He too got up and paced. He too gesticulated and shouted. We behaved like men inspired. We *were* men inspired.

"We'll settle all that!" he said, in answer to some in-

cidental difficulty that had pulled me up. "We'll soon settle all that. We'll start the drawings for mouldings this very night."

"We'll start them now," I responded, and we hurried off to the laboratory, to begin upon this work forthwith.

I was like a child in wonderland all that night. The dawn found us both still at work; we kept our electric light going heedless of the day. I remember now exactly how those drawings looked—I shaded and tinted while Cavor drew—smudged and haste-marked they were in every line, but wonderfully correct. We got out the orders for the steel blinds and frames we needed from that night's work, and the glass sphere was designed within a week. We gave up our afternoon conversations and our old routine altogether. We worked, and we slept and ate when we could work no longer for hunger and fatigue. Our enthusiasm infected even our three men, though they had no idea what the sphere was for. Through those days the man Gibbs gave up walking and went everywhere, even across the room, at a sort of fussy run.

And it grew, the sphere. December passed, January—I spent a day with a broom sweeping a path through the snow from bungalow to laboratory—February, March. By the end of March the completion was in sight. In January had come a team of horses, a huge packing case; we had our thick glass sphere now ready and in position, under the crane we had rigged to sling it into the steel shell. All the bars and blinds of the steel shell—it was not really a spherical shell, but polyhedral, with a roller blind to each facet—had arrived by February, and the lower half was bolted together. The Cavorite was half made by March, the metallic paste had gone through two of the stages in its manufacture, and we had plastered quite half of it on to the steel bars and blinds. It was astonishing how closely we kept to the lines of Cavor's first inspiration in working out the scheme. When the bolting together of the sphere was finished he proposed to remove the rough roof of the temporary laboratory in which the work was done and build a furnace about it. So the last stage of Cavorite making, in which the paste is heated to a dull red glow in a stream of helium, would be accomplished when it was already on the sphere.

And then we had to discuss and decide what provisions we were to take, compressed foods, concentrated essences, steel cylinders containing reserve oxygen, an arrangement for removing carbonic acid and waste from the air and restoring oxygen by means of sodium peroxide, water condensers, and so forth. I remember the little heap they made in the corner, tins and rolls and boxes—convincingly matter-of-fact.

It was a strenuous time, with little chance of thinking. But one day, when we were drawing near the end, an odd mood came over me. I had been bricking up the furnace

all the morning, and I sat down by these possessions, tired out. Everything seemed dull and incredible.

"But look here, Cavor," I said. "After all! What's it all for?"

He smiled. "The thing now is to go."

"The moon," I reflected. "But what do you expect? I thought the moon was a dead world."

He shrugged his shoulders.

"What do you expect?"

"We're going to see."

"Are we?" I said and stared before me.

"You are tired," he remarked. "You'd better take a walk this afternoon."

"No," I said obstinately; "I'm going to finish this brickwork."

And I did, and ensured myself a night of insomnia.

I don't think I have ever had such a night. I had some bad times before my business collapse but the very worst of those was sweet slumber compared to this infinity of aching wakefulness. I was suddenly in the most enormous funk at the thing we were going to do.

I do not remember before that night thinking at all of the risks we were running. Now they came like that array of spectres that once beleaguered Prague, and camped around me. The strangeness of what we were about to do, the unearthliness of it, overwhelmed me. I was like a man awakened out of pleasant dreams to the most horrible surroundings. I lay, eyes wide open; and the sphere seemed to get more flimsy and feeble, and Cavor more unreal and fantastic and the whole enterprise madder and madder, every moment.

I got out of bed and wandered about. I sat at the window and stared at the immensity of space. Between the stars was the void, the unfathomable darkness! I tried to recall the fragmentary knowledge of astronomy I had gained in my irregular reading, but it was all too vague to furnish any idea of the things we might expect. At last I got back to bed and snatched some moments of sleep, moments of nightmare rather, in which I fell and fell and fell for evermore into the abyss of the sky.

I astonished Cavor at breakfast. I told him shortly: "I'm not coming with you in the sphere."

I met all his protests with a sullen persistence. "The thing's too mad," I said, "and I won't come. The thing's too mad."

I would not go with him to the laboratory. I fretted about my bungalow for a time, and then took hat and stick and set off alone, I knew not whither. It chanced to be a glorious morning; a warm wind and deep blue sky, the first green of spring abroad and multitudes of birds singing. I lunched on beef and beer in a little public-house near Elham, and startled

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the landlord by remarking, *à propos* of the weather: "A man who leaves the world when days of this sort are about is a fool!"

"That's what I says when I heerd on it!" said the landlord, and I found that for one poor soul at least this world had proved excessive and there had been a throat-cutting. I went on with a new twist to my thoughts.

In the afternoon I had a pleasant sleep in a sunny place, and went my way refreshed.

I came to a comfortable-looking inn near Canterbury. It was bright with creepers, and the landlady was a clean old woman who took my eye. I found I had just enough money to pay for my lodging with her. I decided to spend the night there. She was a talkative body, and among many other particulars I learnt she had never been to London. "Canterbury's as far as ever I been," she said. "I'm not one of your gad-about sort."

"How would you like a trip to the moon?" I cried.

"I never did hold with them ballooneys," she said, evidently under the impression that this was a common excursion enough. "I wouldn't go up in one—not for ever so."

This struck me as being funny. After I had supped I sat on a bench by the door of the inn and gossiped with two labourers about brickmaking and motor-cars and the cricket of last year. And in the sky a faint new crescent, blue and vague as a distant Alp, sank westward over the sun.

The next day I returned to Cavor. "I am coming," I said. "I've been a little out of order—that's all."

That was the only time I felt any serious doubt of our enterprise. Nerves purely! After that I worked a little more carefully and took a trudge for an hour every day. And at last, save for the heating in the furnace, our labours were at an end.

CHAPTER FOUR

INSIDE THE SPHERE

"Go on," said Cavor as I sat across the edge of the manhole and looked down into the black interior of the sphere. We two were alone. It was evening, the sun had set and the stillness of twilight was upon everything.

I drew my other leg inside and slid down the smooth glass to the bottom of the sphere; then turned to take the cans of food and other impedimenta from Cavor. The interior was warm, the thermometer stood at eighty, and as we should lose little or none of this by radiation, we were dressed in slippers and thin flannels. We had however a bundle of thick woollen clothing and several thick blankets to guard against mischance. By Cavor's direction I placed the packages, the cylinders of oxygen and so forth, loosely about my feet; and soon we had everything in. He walked about the roofless shed for a time, seeking anything we had overlooked, and then crawled in after me. I noted something in his hand.

"What have you there?" I asked.

"Haven't you brought anything to read?"

"Good Lord! No!"

"I forgot to tell you. There are uncertainties—— The voyage may last—— We may be weeks!"

"But——"

"We shall be floating in this sphere with absolutely no occupation."

"I wish I'd known——"

He peered out of the manhole. "Look!" he said. "There's something there!"

"Is there time?"

"We shall be an hour."

I looked out. It was an old number of *Tit-Bits*, that one of the men must have brought. Farther away in the corner I saw a torn *Lloyds' News*. I scrambled back into the sphere with these things. "What have you got?" I said.

I took the book from his hand and read, "The Works of William Shakespeare."

He coloured slightly. "My education has been so purely scientific——" he said apologetically.

"Never read him?"

"Never."

"He knew a little, you know—in an irregular sort of way."

"Precisely what I am told," said Cavor.

I assisted him to screw in the glass cover of the manhole, and then he pressed a stud to close the corresponding blind in the outer case. The little oblong of twilight vanished. We were in darkness.

For a time neither of us spoke. Although our case would not be impervious to sound, everything was very still. I perceived there was nothing to grip when the shock of our start should come, and I realised that I should be uncomfortable for want of a chair.

"Why have we no chairs?" I asked.

"I've settled all that," said Cavor. "We shan't need them."

"Why not?"

"You will see," he said, in the tone of a man who refuses to talk.

I became silent. Suddenly it had come to me, clear and vivid, that I was a fool to be inside that sphere. Even now, I asked myself, is it too late to withdraw? The world outside the sphere, I knew, would be cold and inhospitable enough to me—for weeks I had been living on subsidies from Cavor—but after all, would it be as cold as the infinite zero, as inhospitable as empty space? If it had not been for the appearance of cowardice, I believe that even then I should have made him let me out. But I hesitated on that score and hesitated, and grew fretful and angry, and the time passed.

There came a little jerk, a noise like champagne being uncorked in another room, and a faint whistling sound. For just one instant I had a sense of enormous tension, a transient conviction that my feet were pressing downward with a force of countless tons. It lasted for an infinitesimal time.

But it stirred me to action. "Cavor!" I said in the darkness, "my nerve's in rags . . . I don't think——"

I stopped. He made no answer.

"Confound it!" I cried; "I'm a fool! What business have I here? I'm not coming, Cavor. The thing's too risky. I'm getting out."

"You can't," he said.

"Can't! We'll soon see about that!"

He made no answer for ten seconds. "It's too late for us to quarrel now, Bedford," he said. "That little jerk was the start. Already we are flying as swiftly as a bullet up into the gulf of space."

"I——" I said, and then it did not seem to matter what happened. For a time I was, as it were, stunned. I had nothing to say. It was just as if I had never heard of this idea of leaving the earth before. Then I perceived an unaccountable change in my bodily sensations. It was a feeling of lightness, of unreality. Coupled with that was a queer sensation in the head, an apoplectic effect almost, and a humping of blood-vessels in the ears. Neither of these feelings diminished as time went on, but at last I got so used to them that I experienced no inconvenience.

I heard a click, and a little glow-lamp came into being.

I saw Cavor's face, as white as I felt my own to be. We

regarded each other in silence. The transparent blackness of the glass behind him made him seem to be floating in a void.

"Well, we're committed," I said at last.

"Yes," he said, "we're committed."

"Don't move," he exclaimed, at some suggestion of a gesture. "Let your muscles keep quite lax—as if you were in bed. We are in a little universe of our own. Look at those things!"

He pointed to the loose cases and bundles that had been lying on the blankets in the bottom of the sphere. I was astonished to see that they were floating now nearly a foot from the spherical wall. Then I saw from his shadow that Cavor was no longer leaning against the glass. I thrust out my hand behind me and found that I too was suspended in space, clear of the glass.

I did not cry out nor gesticulate, but fear came upon me. It was like being lifted and held by something—you know not what! The mere touch of my hand against the glass moved me rapidly. I understood what had happened but that did not prevent my being afraid. We were cut off from all exterior gravitation—only the attraction of objects within our sphere had effect. Consequently everything that was not fixed to the glass was falling—slowly because of the slightness of our masses—towards the centre of gravity of our little world, which seemed to be somewhere about the middle of the sphere, but rather nearer to myself than to Cavor on account of my greater weight.

"We must turn round," said Cavor, "and float back to back, with the things between us."

It was the strangest sensation conceivable, floating thus loosely in space, at first indeed horribly strange, and when the horror passed, not disagreeable at all, exceedingly restful! indeed the nearest thing in earthly experience to it that I know is lying on a very thick soft feather bed. But the quality of utter detachment and independence! I had not reckoned on anything like this. I had expected a violent jerk at starting, a giddy sense of speed. Instead I felt—as if I were disembodied. It was not like the beginning of a journey; it was like the beginning of a dream.

CHAPTER FIVE

THE JOURNEY TO THE MOON

PRESENTLY Cavor extinguished the light. He said we had not overmuch energy stored and what we had we must economise for reading. For a time, whether it was long or short I do not know, there was nothing but blank darkness.

A question floated up out of the void. "How are we pointing?" I said. "What is our direction?"

"We are flying away from the earth at a tangent, and as the moon is near her third quarter, we are going somewhere towards her. I will open a blind——"

There came a click and then a window in the outer case yawned open. The sky outside was as black as the darkness within the sphere, but the shape of the open window was marked by an infinite number of stars.

Those who have seen the starry sky only from the earth cannot imagine its appearance when the vague half-luminous veil of our air has been withdrawn. The stars we see on earth are the mere scattered survivors that penetrate our misty atmosphere. But now at last I could realise the meaning of the hosts of heaven! Stranger things we were presently to see, but that airless, star-dusted sky! Of all things I think that will be one of the last I shall forget.

The little window vanished with a click, another beside it snapped open and instantly closed, and then a third, and for a moment I had to close my eyes because of the blinding splendour of the waning moon.

For a space I had to stare at Cavor and the white-lit things about me to season my eyes to light again, before I could turn them towards that pallid glare.

Four windows were open in order that the gravitation of the moon might act upon all the substances in our sphere. I found I was no longer floating freely in space, but that my feet were resting on the glass in the direction of the moon. The blankets and cases of provisions were also creeping slowly down the glass, and presently came to rest so as to block out a portion of the view. It seemed to me, of course, that I looked "down" when I looked at the moon. On earth "down" means earthward, the way things fall, and "up" the reverse direction. Now the pull of gravitation was towards the moon, and for all I knew to the contrary our earth was overhead. And of course, when all the Cavorite blinds were closed, "down" was towards the centre of our sphere, and "up" towards its outer wall.

It was curiously unlike earthly experience, too, to have the light coming up. On earth light falls from above or comes

slanting down sidewise, but here it came from beneath our feet, and to see our shadows we had to look up.

At first it gave me a sort of vertigo to stand only on thick glass and look down upon the moon through hundreds of thousands of miles of vacant space. But this sickness passed very speedily. And then—the splendour of the sight!

The reader may imagine it best if he will lie on the ground some warm summer's night and look between his upraised feet at the moon, but for some reason, probably because the absence of air made it so much more luminous, the moon seemed already considerably larger than it does from earth. The minutest details of its surface were acutely clear. And since we did not see it through air, its outline was bright and sharp; there was no glow or halo about it and the star-dust that covered the sky came right to its very margin and marked the outline of its illuminated part. And as I stood and stared at the moon between my feet, that perception of the impossible that had been with me off and on ever since our start returned again with tenfold conviction.

"Cavor," I said, "this takes me queerly. Those companies we were going to run and all that about minerals——"

"Well?"

"I don't see 'em here."

"No," said Cavor, "but you'll get over all that."

"I suppose I'm made to turn right side up again. Still *this*—— For a moment I could half believe there never was a world."

"That copy of *Lloyds' News* might help you."

I stared at the paper for a moment, then held it above the level of my face and found I could read it quite easily. I struck a column of mean little advertisements. "A gentleman of private means is willing to lend money," I read. I knew that gentleman. Then somebody eccentric wanted to sell a Cut-away bicycle, "quite new and cost £15," for £5, and a lady in distress wished to dispose of some fish knives and forks, "a wedding present," at a great sacrifice. No doubt some simple soul was sagely examining those knives and forks, and another triumphantly riding off on that bicycle, and a third trustfully consulting that benevolent gentleman of means, even as I read. I laughed and let the paper drift from my hand.

"Are we visible from the earth?" I asked.

"Why?"

"I knew some one—who was interested in astronomy. It occurred to me that it would be odd if—my friend—chanced to be looking through a telescope and should chance to see us."

"It would need the most powerful telescope on earth even now to see us as the minutest speck."

For a time I stared in silence at the moon.

"It's a world," I said; "one feels that infinitely more than one ever did on earth. People perhaps——"

"People!" he exclaimed. "No! Banish all that. Think yourself a sort of ultra Arctic voyager exploring the desolate places of space. Look at it!"

He waved his hand at the shining whiteness below. "It's dead—dead! Vast extinct volcanoes, lava wildernesses, tumbled wastes of snow or frozen carbonic acid or frozen air, and everywhere landslips, seams and cracks and gulfs. Nothing happens. Men have watched this planet systematically with telescopes for over two hundred years. How much change do you think they have seen?"

"None."

"They have traced two indisputable landslips, a doubtful crack and one slight periodic change of colour. And that's all."

"I didn't know they'd traced even that."

"Oh, yes. But as for people——!"

"By the way," I asked, "how small a thing will the biggest telescopes show upon the moon?"

"One could see a fair-sized church. One could certainly see any towns or buildings or anything like the handiwork of men. There might perhaps be insects, something in the way of ants for example, something able to hide in deep burrows from the lunar night. Or some new sort of creatures having no earthly parallel. That is the most probable thing if we are to find life there at all. Think of the difference in conditions! Life must fit itself to a day as long as fourteen earthly days, a cloudless sun-blaze of fourteen days, and then a night of equal length, growing ever colder and colder under these cold, sharp stars. In that night there must be cold, the ultimate cold, absolute zero, 273° Centigrade, below the earthly freezing point. Whatever life there is must hibernate through that—and rise again each day."

He mused. "One can imagine something wormlike," he said, "taking its air solid as an earthworm swallows earth, or thick-skinned monsters——"

"By the bye," I said, "why didn't we bring a gun?"

He did not answer that question. "No," he concluded, "we just have to go. We shall see when we get there."

I remembered something. "Of course, there's my minerals anyhow," I said, "whatever the conditions may be."

Presently he told me he wished to alter our course a little by letting the earth tug at us for a moment. He was going to open one earthward blind for thirty seconds. He warned me that it would make my head swim, and advised me to extend my hands against the glass to break my fall. I did as he directed, and thrust my feet against the bales of food cases and air cylinders to prevent their falling upon me. Then with a click the window flew open. I fell clumsily upon hands and face and saw for a moment between my black extended fingers, our mother earth—a planet in a downward sky.

We were still very near—Cavor told me the distance was, perhaps, eight hundred miles—and the huge terrestrial disc filled all heaven. But already it was plain to see that the world was a globe. The land below us was in twilight and vague, but westward the vast grey stretches of the Atlantic shone like molten silver under the receding day. I think I recognised the cloud-dimmed coast-lines of France and Spain and the south of England, and then with a click the shutter closed again and I found myself in a state of extraordinary confusion, sliding slowly over the smooth glass.

When at last matters settled themselves in my mind again, it seemed quite beyond question that the moon was "down" under my feet, and that the earth was somewhere away on the level of the horizon, the earth that had been "down" to me and my kindred since the beginning of things.

So slight were the exertions required of us, so easy did the practical annihilation of our weight make all we had to do, that the necessity for taking refreshment did not occur to us for nearly six hours (by Cavor's chronometer) after our start. I was amazed at that lapse of time. Even then I was satisfied with very little. Cavor examined the apparatus for absorbing carbonic acid and water, and pronounced it to be in satisfactory order, our consumption of oxygen having been extraordinarily slight; our talk being exhausted for the time, and there being nothing further for us to do, we gave way to a curious drowsiness that had come upon us, and spreading our blankets on the bottom of the sphere in such a manner as to shut out most of the moonlight, wished each other good-night, and almost immediately fell asleep.

And so sleeping, and sometimes talking and reading a little, at times eating, though without any keenness of appetite,[1] but for the most part in a sort of quiescence that was neither waking nor slumber, we fell through a space of time that had neither night nor day in it, silently, softly, and swiftly down towards the moon.

[1] It is a curious thing that while we were in the sphere we felt not the slightest desire for food nor did we feel the want of it when we abstained. At first we forced our appetite but afterwards we fasted completely. Altogether we did not consume one-twentieth part of the compressed provision we had brought with us. The amount of carbonic acid we exhaled was also unnaturally low, but why this was so I am quite unable to explain.

CHAPTER SIX

THE LANDING ON THE MOON

I REMEMBER how one day Cavor suddenly opened six of our shutters and blinded me so that I cried aloud at him. The whole area was moon, a stupendous scimitar of white dawn with its edge hacked out by notches of darkness, the crescent shore of an ebbing tide of darkness, out of which peaks and pinnacles came climbing into the blaze of the sun. I take it the reader has seen pictures or photographs of the moon, so that I need not describe the broader features of that landscape, those spacious, ringlike ranges vaster than any terrestrial mountains, their summits shining in the day, their shadows harsh and deep; the grey disordered plains, the ridges, hills and craterlets all passing at last from a blazing illumination into a common mystery of black. Athwart this world we were flying scarcely a hundred miles above its crests and pinnacles. And now we could see, what no human eye had ever seen before, that under the blaze of the day the harsh outlines of the rocks and ravines of the plains and crater floor grew grey and indistinct under a thickening haze, that the white of their lit surfaces broke into lumps and patches and broke again and shrank and vanished, and that here and there strange tints of brown and olive grew and spread.

But little time we had for watching then. For now we had come to the real danger of our journey. We had to drop ever closer to the moon as we spun about it, to slacken our pace and watch our chance until at last we could dare to drop upon its surface.

For Cavor that was a time of intense exertion; for me it was an anxious inactivity. I seemed perpetually to be getting out of his way. He leaped about the sphere from point to point with an agility that would have been impossible on earth. He was perpetually opening and closing the Cavorite windows, making calculations, consulting his chronometer by means of the glow-lamp during those last eventful hours. For a long time we had all our windows closed, and hung silently in darkness, hurtling through space.

Then he was feeling for the shutter studs, and suddenly four windows were open. I staggered and covered my eyes, drenched and scorched and blinded by the unaccustomed splendour of the sun beneath my feet. Then again the shutters snapped, leaving my brain spinning in a darkness that pressed against the eyes. And after that I floated in another vast black silence.

Then Cavor switched on the electric light, and told me he proposed to bind all our luggage together with blankets about it, against the concussion of our descent. We did this with

our windows closed, because in that way our goods arranged themselves naturally at the centre of the sphere. That too was a strange business; we two men floating loose in that spherical space and packing and pulling ropes. Imagine it if you can! No up nor down, and every effort resulting in unexpected movements. Now I would be pressed against the glass with the full force of Cavor's thrust; again I would be kicking helplessly in a void. Now the star of the electric light would be overhead, now under foot. Now Cavor's feet would float up before my eyes, and now we would be crosswise to each other. But at last our goods were safely bound together in a big soft bale, all except two blankets with head holes that we were to wrap about ourselves.

Then for a flash Cavor opened a window moonward, and we saw that we were dropping towards a huge central crater, with a number of minor craters grouped in a cross about it. And then again Cavor flung our little sphere open to the scorching, blinding sun. I think he was using the sun's attraction as a brake. "Cover yourself with a blanket," he cried, thrusting himself from me, and for a moment I did not understand.

Then I hauled the blanket from beneath my feet and got it about me and over my head and eyes. Abruptly he closed the shutters, snapped one open again and closed it; then suddenly began snapping them all open, each safely into its steel roller. There came a jar and then we were rolling over and over, bumping against the glass and against the big bale of our luggage, and clutching at each other, and outside some white substance splashed as if we were rolling down a slope of snow. . . .

Over, clutch, bump, clutch, bump, over. . . .

Came a thud, and I was half buried under the bale of our possessions, and for a space everything was still. Then I could hear Cavor puffing and grunting and the snapping of a shutter in its sash. I made an effort, thrust back our blanket-wrapped luggage, and emerged from beneath it. Our open windows were just visible as a deeper black set with stars.

We were still alive, and we were lying in the darkness of the shadow of the wall of the great crater into which we had fallen.

We sat getting our breath again and feeling the bruises on our limbs. I think neither of us had had a very clear expectation of such rough handling as we had received. I struggled painfully to my feet. "And now," said I, "to look at the landscape of the moon! But——! It's tremendously dark, Cavor!"

The glass was dewy, and as I spoke I wiped at it with my blanket. "We're half an hour or so beyond the day," he said. "We must wait."

It was impossible to distinguish anything. We might have been in a sphere of steel for all that we could see. My rubbing with the blanket simply smeared the glass, and as fast as I

wiped it, it became opaque again with freshly-condensed moisture mixed with an increasing quantity of blanket hairs. Of course I ought not to have used the blanket. In my efforts to clear the glass I slipped upon the damp surface and hurt my shin against one of the oxygen cylinders that protruded from our bale.

The thing was exasperating—it was absurd. Here we were just arrived upon the moon, amidst we knew not what wonders, and all we could see was the grey and streaming wall of the bubble in which we had come.

"Confound it," I said, "but at this rate we might have stopped at home!" and I squatted on the bale and shivered and drew my blanket closer about me.

Abruptly the moisture turned to spangles and fronds of frost. "Can you reach the electric heater?" said Cavor. "Yes—that black knob. Or we shall freeze."

I did not wait to be told twice. "And now," said I, "what are we to do?"

"Wait," he said.

"Wait?"

"Of course. We shall have to wait until our air gets warm again, and then this glass will clear. We can't do anything till then. It's night here yet—we must wait for the day to overtake us. Meanwhile, don't you feel hungry?"

For a space I did not answer him, but sat fretting. I turned reluctantly from the crater wall. These hummocks looked like snow. At the time I thought they were snow. But they were not—they were mounds and masses of frozen air!

So it was at first; and then, sudden, swift, and amazing, came the lunar day.

The sunlight had crept down the cliff, it touched the drifted masses at its base, and incontinently came striding with seven-leagued boots towards us. The distant cliff seemed to shift and quiver, and at the touch of the sun a reek of grey vapour poured upwards from the crater floor, whirls and puffs and drifting wraiths of grey, thicker and broader and denser, until at last the whole westward plain was steaming like a wet handkerchief held before the fire, and the westward cliffs were no more than a refracted glare beyond.

"It is air," said Cavor. "It must be air—or it would not rise like this—at the mere touch of a sunbeam. And at this pace. . . ."

He peered upwards. "Look!" he said.

"What?" I asked.

"In the sky. Already. On the blackness—a little touch of blue. See! The stars seem larger; the little ones and all those dim nebulosities we saw in empty space—they are hidden!"

Swiftly, steadily the day approached us. Grey summit after grey summit was overtaken by the blaze, and turned to a

smoking white intensity. At last there was nothing to the west of us but a bank of surging fog, the tumultuous advance and ascent of cloudy haze. The distant cliff had receded farther and farther, had loomed and changed through the whirl, had foundered and vanished at last in its confusion.

Nearer came that steaming advance, nearer and nearer, coming as fast as the shadow of a cloud before the south-west wind. About us rose a thin, anticipatory haze.

Cavor gripped my arm. "What?" I said.

"Look! The sunrise! The sun!"

He turned me about and pointed to the brow of the eastward cliff, looming above the haze about us, scarcely lighter than the darkness of the sky. But now its line was marked by strange reddish shapes — tongues of vermilion flame that writhed and danced. I fancied it must be spirals of vapour that had caught the light and made this crest of fiery tongues against the sky, but indeed it was the solar prominences I saw, a crown of fire about the sun that is for ever hidden from earthly eyes by our atmospheric veil.

And then—the sun!

Steadily, inevitably, came a brilliant line—came a thin edge of intolerable effulgence that took a circular shape, became a bow, became a blazing sceptre, and hurled a shaft of heat at us as though it were a spear.

It seemed verily to stab my eyes! I cried aloud and turned about blinded, groping for my blanket beneath the bale.

And with that incandescence came a sound, the first sound that had reached us from without since we left the earth, a hissing and rustling, the stormy trailing of the aerial garment of the advancing day. And with the coming of the sound and the light the sphere lurched, and, blinded and dazzled, we staggered helplessly against each other. It lurched again, and the hissing grew louder. I had shut my eyes perforce; I was making clumsy efforts to cover my head with my blanket, and this second lurch sent me helplessly off my feet. I fell against the bale, and, opening my eyes, had a momentary glimpse of the air just outside our glass. It was running—it was boiling—like snow into which a white-hot rod is thrust. What had been solid air had suddenly, at the touch of the sun, become a paste, a mud, a slushy liquefaction that hissed and bubbled into gas.

There came a still more violent whirl of the sphere, and we had clutched each other. In another moment we were spun about again. Round we went and over, and then I was on all fours. The lunar dawn had hold of us. It meant to show us little men what the moon could do with us.

I caught a second glimpse of things without, puffs of vapour, half-liquid slush, excavated, sliding, falling, sliding. We dropped into darkness. I went down with Cavor's knees in my chest. Then he seemed to fly away from me, and for a

moment I lay, with all the breath out of my body, staring upwards. A huge landslip, as it were, of melting stuff had splashed over us, buried us, and now it thinned and boiled away from us. I saw the bubbles dancing on the glass above. I heard Cavor exclaiming feebly.

Then some huge landslip in the thawing air had caught us and, spluttering expostulation, we began to roll down a slope, rolling faster and faster, leaping crevasses and rebounding from banks, faster and faster, westward into the white-hot boiling tumult of the lunar day.

Clutching at each other we spun about, pitched this way and that, our bale of packages leaping at us, pounding at us. We collided, we gripped, we were torn asunder—our heads met, and the whole universe burst into fiery darts and stars! On the earth we should have smashed each other a dozen times, but on the moon luckily for us our weight was only one-sixth of what it is terrestrially, and we fell very mercifully. I recall a sensation of utter sickness, a feeling as if my brain were upside down within my skull, and then——

Something was at work upon my face; some thin feelers worried my ears. Then I discovered the brilliance of the landscape around was mitigated by blue spectacles. Cavor bent over me, and I saw his face upside down, his eyes also protected by tinted goggles. His breath came irregularly, and his lip was bleeding from a bruise. "Better?" he said, wiping the blood with the back of his hand.

Everything seemed swaying for a space, but that was simply my giddiness. I perceived that he had closed some of the shutters in the outer sphere to save me from the direct blaze of the sun. I was aware that everything about us was very brilliant.

"Lord!" I gasped. "But this——"

I craned my neck to see. I perceived there was a blinding glare outside, an utter change from the gloomy darkness of our first impressions. "Have I been insensible long?" I asked.

"I don't know—the chronometer is broken. Some little time. . . . My dear chap! I have been afraid. . . ."

I lay for a space taking this in. I saw his face still bore evidences of emotion. For a while I said nothing. I passed an inquisitive hand over my contusions, and surveyed his face for similar damages. The back of my right hand had suffered most, and was skinless and raw. My forehead was bruised and had bled. He handed me a measure with some of the restorative—I forget the name of it—he had brought with us. After a time I felt a little better. I began to stretch my limbs carefully. Soon I could talk.

"It wouldn't have done," I said, as though there had been no interval.

"No, it *wouldn't*!"

He thought, his hands hanging over his knees. He peered through the glass and then stared at me. "Good Lord!" he said. "No!"

"What has happened?" I asked after a pause; "have we jumped to the tropics?"

"It was as I expected. This air has evaporated. If it is air. At any rate it has evaporated, and the surface of the moon is showing. We are lying on a bank of earthy rock. Here and there bare soil is exposed; a queer sort of soil."

It occurred to him that it was unnecessary to explain. He assisted me into a sitting position, and I could see with my own eyes.

CHAPTER SEVEN

A LUNAR MORNING

THE harsh emphasis, the pitiless black and white of the scenery had altogether disappeared. The glare of the sun had taken upon itself a faint tinge of amber ; the shadows upon the cliff of the crater wall were deeply purple. To the eastward a dark bank of fog still crouched and sheltered fromt he sunrise, but to the westward the sky was blue and clear. I began to realise the length of my insensibility.

We were no longer in a void. An atmosphere had risen about us. The outline of things had gained in character, had grown acute and varied ; save for a shadowed space of white substance here and there, white substance that was no longer air but snow, the Arctic appearance had gone altogether. Everywhere broad, rusty-brown spaces of bare and tumbled earth spread to the blaze of the sun. Here and there at the edge of the snowdrifts were transient little pools and eddies of water, the only things stirring in that expanse of barrenness. The sunlight inundated the upper two-thirds of our sphere and turned our climate to high summer, but our feet were still in shadow and the sphere was lying upon a drift of snow.

And scattered here and there upon the slope, and emphasised by little white threads of unthawed snow upon their shady sides, were shapes like sticks—dry, twisted sticks of the same rusty hue as the rock upon which they lay. That caught one's thoughts sharply. Sticks ! On a lifeless world ? Then as my eye grew more accustomed to the texture of their substance I perceived that almost all this surface had a fibrous texture, like the carpet of brown needles one finds beneath the shade of pine trees.

" Cavor ! " I said.

" Yes ? "

" It may be a dead world now—but once——"

Something arrested my attention. I had discovered among these needles a number of little round objects. It seemed to me that one of these had moved.

" Cavor," I whispered.

" What ? "

But I did not answer at once. I stared incredulous. For an instant I could not believe my eyes. I gave an inarticulate cry. I gripped his arm. I pointed. " Look ! " I cried, finding my tongue. " There ! Yes ! And there ! "

His eyes followed my pointing finger. " Eh ? " he said.

How can I describe the thing I saw ? It is so petty a thing to state, and yet it seemed so wonderful, so pregnant with emotion. I have said that amidst the stick-like litter were

these round bodies, these little oval bodies that might have passed as very small pebbles. And now first one and then another had stirred, had rolled over and cracked, and down the crack of each of them showed a minute line of yellowish green, thrusting outward to meet the hot encouragement of the newly risen sun. For a moment that was all, and then there stirred and burst a third!

"It is a seed," said Cavor. And then I heard him whisper, very softly: "*Life!*"

"Life!" and immediately it poured upon us that our vast journey had not been made in vain, that we had come to no arid waste of minerals, but to a world that lived and moved! We watched intensely. I remember I kept rubbing the glass before me with my sleeve, jealous of the faintest suspicion of mist.

The picture was clear and vivid only in the middle of the field. All about that centre the dead fibres and seeds were magnified and distorted by the curvature of the glass. But we could see enough! One after another all down the sunlit slope these miraculous little brown bodies burst and gaped apart, like seed-pods, like the husks of fruits; opened eager mouths that drank in the heat and light pouring in a cascade from the newly risen sun.

Every moment more of these seed-coats ruptured, and even as they did so the swelling pioneers overflowed their rent distended seed-cases and passed into the second stage of growth. With a steady assurance, a swift deliberation, these amazing seeds thrust a rootlet downward to the earth and a queer bundle-like bud into the air. In a little while the whole slope was dotted with minute plantlets standing at attention in the blaze of the sun.

They did not stand for long. The bundle-like buds swelled and strained and opened with a jerk, thrusting out a coronet of red sharp tips, spreading a whorl of tiny, spiky, brownish leaves, that lengthened rapidly, lengthened visibly even as we watched. The movement was slower than any animal's, swifter than any plant's I have ever seen before. How can I suggest it to you—the way that growth went on? The leaf tips grew so that they moved onward even while we looked at them. The brown seed-case shrivelled and was absorbed with an equal rapidity. Have you ever on a cold day taken a thermometer into your warm hand and watched the little thread of mercury creep up the tube? These moon-plants grew like that.

In a few minutes, as it seemed, the buds of the more forward of these plants had lengthened into a stem, and were even putting forth a second whorl of leaves, and all the slope that had seemed so recently a lifeless stretch of litter was now dark with the stunted, olive-green herbage of bristling spikes, that swayed with the vigour of their growing.

I turned about, and behold! along the upper edge of a rock to the eastward a similar fringe, in a scarcely less forward condition, swayed and bent, dark against the blinding glare of the sun. And beyond this fringe was the silhouette of a plant mass, branching clumsily like a cactus and swelling visibly, swelling like a bladder that fills with air.

Then to the westward also I discovered another such distended form was rising over the scrub. But here the light fell upon its sleek sides, and I could see that its colour was a vivid orange. It rose as one watched it; if one looked away from it for a minute and then back, its outline had changed: it thrust out blunt, congested branches, until in a little time it rose a coralline shape of many feet in height. Compared with such a growth the terrestrial puff-ball which will sometimes swell a foot in diameter in a single night, would be a hopeless laggard. But then the puff-ball grows against a gravitational pull of six times that of the moon. Beyond, out of gullies and flats that had been hidden from us but not from the quickening sun, over reefs and banks of shining rock, a bristling beard of spiky and fleshy vegetation was straining into view, hurrying tumultuously to take advantage of the brief day in which it must flower and fruit and seed again and die. It was like a miracle, that growth. So, one must imagine, the trees and plants arose at the Creation, and covered the desolation of the new-made earth.

Imagine it! Imagine that dawn! The resurrection of the frozen air, the stirring and quickening of the soil, and then this silent uprising of vegetation, this unearthly ascent of fleshiness and spikes. Conceive it all lit by a blaze that would make the intensest sunlight of earth seem watery and weak. And still amidst this stirring jungle wherever there was shadow lingered banks of bluish snow. And to have the picture of our impression complete you must bear in mind that we saw it all through a thick bent glass, distorting it as things are distorted by a lens, acute only in the centre of the picture and very bright there, and towards the edges magnified and unreal.

CHAPTER EIGHT

PROSPECTING BEGINS

We ceased to gaze. We turned to each other, the same thought, the same question in our eyes. For these plants to grow there must be some air, however attenuated—air that we also should be able to breathe.

"The manhole?" I said.

"Yes," said Cavor; "if it is air we see!"

"In a little while," I said, "these plants will be as high as we are. Suppose—suppose, after all—— Is it certain? How do you know that stuff *is* air? It may be nitrogen; it may be carbonic acid even!"

"That is easy," he said, and set about proving it. He produced a big piece of crumpled paper from the bale, lit it, and thrust it hastily through the manhole valve. I bent forward and peered down through the thick glass for its appearance outside, that little flame on whose evidence depended so much!

I saw the paper drop out and lie lightly upon the snow. The pink flame of its burning vanished. For an instant it seemed to be extinguished. . . . And then I saw a little blue tongue upon the edge of it that trembled and crept and spread!

Quietly the whole sheet, save where it lay in immediate contact with the snow, charred and shrivelled and sent up a quivering thread of smoke. There was no doubt left to me: the atmosphere of the moon was either pure oxygen or air, and capable therefore, unless its tenuity were excessive, of supporting our alien life. We might emerge—and live!

I sat down with my legs on either side of the manhole and prepared to unscrew it, but Cavor stopped me. "There is first a little precaution," he said. He pointed out that, although it was certainly an oxygenated atmosphere outside, it might still be so rarefied as to cause us grave injury. He reminded me of mountain sickness and of the bleeding that often afflicts aeronauts who have ascended too swiftly, and he spent some time in the preparation of a sickly tasting drink which he insisted on my sharing. It made me feel a little numb, but otherwise had no effect on me. Then he permitted me to begin unscrewing.

Presently the glass stopper of the manhole was so far undone that the denser air within our sphere began to escape along the thread of the screw, singing as a kettle sings before it boils. Thereupon he made me desist. It speedily became evident that the pressure outside was very much less than it was within. How much less it was we had no means of telling.

I sat grasping the stopper with both hands, ready to close it again if, in spite of our intense hope, the lunar atmosphere

should after all prove too rarefied for us, and Cavor sat with a cylinder of compressed oxygen at hand to restore our pressure. We looked at each other in silence, and then at the fantastic vegetation that swayed and grew visibly and noiselessly without. And ever that shrill piping continued.

The blood-vessels began to throb in my ears, and the sound of Cavor's movements diminished. I noted how still everything had become because of the thinning of the air.

As our air sizzled out from the screw the moisture of it condensed in little puffs.

Presently I experienced a peculiar shortness of breath—that lasted, indeed, during the whole of the time of our exposure to the moon's exterior atmosphere, and a rather unpleasant sensation about the ears and finger-nails and the back of the throat grew on my attention, and presently passed off again.

But then came vertigo and nausea that abruptly changed the quality of my courage. I gave the lid of the manhole half a turn and made a hasty explanation to Cavor, but now he was the more sanguine. He answered me in a voice that seemed extraordinarily small and remote because of the thinness of the air that carried the sound. He recommended a nip of brandy, and set me the example, and presently I felt better. I turned the manhole stopper back again. The throbbing in my ears grew louder, and then I remarked that the piping note of the outrush had ceased. For a time I could not be sure that it had ceased.

"Well?" said Cavor, in the ghost of a voice.

"Well?" said I.

"Shall we go on?"

I thought. "Is this all?"

"If you can stand it."

By way of answer I went on unscrewing. I lifted the circular operculum from its place and laid it carefully on the bale. A flake or so of snow whirled and vanished as that thin and unfamiliar air took possession of our sphere. I knelt and then seated myself on the edge of the manhole, peering over it. Beneath, within a yard of my face, lay the untrodden snow of the moon.

There came a little pause. Our eyes met.

"It doesn't distress your lungs too much?" said Cavor.

"No," I said. "I can stand this."

He stretched out his hand for his blanket, thrust his head through its central hole, and wrapped it about him. He sat down on the edge of the manhole; he let his feet drop until they were within six inches of the lunar snow. He hesitated for a moment, then thrust himself forwards, dropped these intervening inches, and stood upon the untrodden soil of the moon.

As he stepped forwards he was refracted grotesquely by the

edge of the glass. He stood for a moment looking this way and that. Then he drew himself together and leaped.

The glass distorted everything, but it seemed to me even then to be an extremely big leap. He had at one bound become remote. He seemed twenty or thirty feet off. He was standing high upon a rocky mass and gesticulating back to me. Perhaps he was shouting—but the sound did not reach me. But how the deuce had he done this ? I felt like a man who has just seen a new conjuring trick.

Still in a puzzled state of mind, I too dropped through the manhole. I stood up. Just in front of me the snowdrift had fallen away and made a sort of ditch. I made a step and jumped.

I found myself flying through the air, saw the rock on which he stood coming to meet me, clutched it, and clung in a state of infinite amazement. I gasped a painful laugh. I was tremendously confused. Cavor bent down and shouted in piping tones for me to be careful. I had forgotten that on the moon, with only an eighth part of the earth's mass and a quarter of its diameter, my weight was barely a sixth what it was on earth. But now that fact insisted on being remembered.

"We are out of Mother Earth's leading-strings now," he said.

With a guarded effort I raised myself to the top and, moving as cautiously as a rheumatic patient, stood up beside him under the blaze of the sun. The sphere lay behind us on its dwindling snowdrift thirty feet away.

As far as the eye could see over the enormous disorder of rocks that formed the crater floor the same bristling scrub that surrounded us was starting into life, diversified here and there by bulging masses of a cactus form, and scarlet and purple lichens that grew so fast they seemed to crawl over the rocks. The whole area of the crater seemed to me then to be one similar wilderness up to the very foot of the surrounding cliff.

This cliff was apparently bare of vegetation save at its base, and with buttresses and terraces and platforms that did not very greatly attract our attention at the time. It was many miles away from us in every direction ; we seemed to be almost at the centre of the crater, and we saw it through a certain haziness that drove before the wind. For there was even a wind now in the thin air—a swift yet weak wind that chilled exceedingly, but exerted little pressure. It was blowing round the crater, as it seemed, to the hot, illuminated side from the foggy darkness under the sunward wall. It was difficult to look into this eastward fog ; we had to peer with half-closed eyes beneath the shade of our hands, because of the fierce intensity of the motionless sun.

"It seems to be deserted," said Cavor, "absolutely desolate."

I looked about me again. I retained even then a clinging

hope of some quasi-human evidence, some pinnacle of building some house or engine ; but everywhere spread the tumbled rocks in peaks and crests, and the darting scrub and those bulging cacti that swelled and swelled, a flat negation as it seemed of all such hope.

"It looks as though these plants had it to themselves," I said. "I see no trace of any other creature."

"No insects—no birds—no ! Not a trace, not a scrap or particle of animal life. If there was—what would they do in the night ? . . . No ; there's just these plants alone."

I shaded my eyes with my hand. "It's like the landscape of a dream. These things are less like earthly land plants than the things one imagines among the rocks at the bottom of the sea. Look at that, yonder ! One might imagine it a lizard changed into a plant. And the glare ! "

"This is only the fresh morning," said Cavor.

He sighed and looked about him. "This is no world for men," he said. "And yet in a way . . . it appeals."

He became silent for a time, then commenced his meditative humming. I started at a gentle touch, and found a thin sheet of livid lichen lapping over my shoe. I kicked at it ; it fell to powder, and each speck began to grow. I heard Cavor exclaim sharply, and perceived that one of the fixed bayonets of the scrub had pricked him.

He hesitated, his eyes sought among the rocks about us. A sudden blaze of pink had crept up a ragged pillar of crag. It was a most extraordinary pink, a livid magenta.

"Look ! " said I, turning, and behold Cavor had vanished.

For an instant I stood transfixed. Then I made a hasty step to look over the verge of the rock. But, in my surprise at his disappearance, I forgot once more that we were on the moon. The thrust of my foot that I made in striding would have carried me a yard on earth ; on the moon it carried me six—a good five yards over the edge. For the moment the thing had something of the effect of one of those nightmares when one falls and falls. For while one falls sixteen feet in the first second of a fall on earth, on the moon one falls two, and with only a sixth of one's weight. I fell, or rather I jumped down, about ten yards I supposed. It seemed to take a long time—five or six seconds, I should think. I floated through the air and fell like a feather, knee-deep in a snowdrift in the bottom of a gully of blue-grey, white-veined rock.

I looked about me. "Cavor ! " I cried, but no Cavor was visible.

"Cavor ! " I cried louder, and the rocks echoed me.

I turned fiercely to the rocks and clambered to the summit of them. "Cavor," I cried. My voice sounded like the voice of a lost lamb.

The sphere too was not in sight, and for a moment a horrible feeling of desolation pinched my heart.

Then I saw him. He was laughing and gesticulating to attract my attention. He was on a bare patch of rock twenty or thirty yards away. I could not hear his voice, but "Jump!" said his gestures. I hesitated, the distance seemed enormous. Yet I reflected that surely I must be able to clear a greater distance than Cavor.

I made a step back, gathered myself together, and leaped with all my might. I seemed to shoot up in the air as if I should never come down.

It was horrible and delightful, and as wild as a nightmare to go flying off in this fashion. I realised my leap had been altogether too violent. I flew clean over Cavor's head, and beheld a spiky confusion in a gully spreading to meet my fall. I gave a yelp of alarm. I put out my hands and straightened my legs.

I hit a huge fungoid bulk that burst all about me, scattering a mass of orange spores in every direction, and covering me with orange powder. I rolled over spluttering, and came to rest convulsed with breathless laughter.

I became aware of Cavor's little round face peering over a bristling hedge. He shouted some faded inquiry. "Eh?" I tried to shout, but could not do so for want of breath. He made his way towards me, coming gingerly among the bushes. "We've got to be careful!" he said. "This moon has no discipline. She'll let us smash ourselves."

He helped me to my feet. "You exerted yourself too much," he said, dabbing at the yellow stuff with his hand to remove it from my garments.

I stood passive and panting, allowing him to beat off the jelly from my knees and elbows and lecture me upon my misfortunes. "We don't quite allow for the gravitation. Our muscles are scarcely educated yet. We must practise a little. When you have got your breath."

I pulled two or three little thorns out of my hand, and sat for a time on a boulder of rock. My muscles were quivering, and I had that feeling of personal disillusionment that comes to the learner of cycling on earth at his first fall.

It suddenly occurred to Cavor that the cold air in the gully after the brightness of the sun might give me a fever. So we clambered back into the sunlight. We found that beyond a few abrasions I had received no serious injuries from my tumble, and at Cavor's suggestion we were presently looking round for some safe and easy landing-place for my next leap. We chose a rocky slab some ten yards off, separated from us by a little thicket of olive-green spikes.

"Imagine it there!" said Cavor, who was assuming airs of a trainer, and he pointed to a spot about four feet from my toes. This leap I managed without difficulty, and I must confess I found a certain satisfaction in Cavor's falling short by a foot or so and tasting the spikes of the scrub. "One

has to be careful, you see," he said, pulling out his thorns and with that he ceased to be my mentor and became my fellow-learner in the art of lunar locomotion.

We chose a still easier jump and did it without difficulty, and then leaped back again and to and fro several times, accustoming our muscles to the new standard. I could never have believed, had I not experienced it, how rapid that adaptation would be. In a very little time indeed, certainly after fewer than thirty leaps, we could judge the effort necessary for a distance with almost terrestrial assurance.

And all this time the lunar plants were growing around us, higher and denser and more entangled, every moment thicker and taller, spiked plants, green cactus masses, fungi, fleshy and lichenous things, strange radiate and sinuous shapes. But we were so intent upon our leaping that for a time we gave no heed to their unfaltering expansion.

An extraordinary elation had taken possession of us. Partly I think it was our sense of release from the confinement of the sphere. Mainly, however, the thin sweetness of the air, which I am certain contained a much larger proportion of oxygen than our terrestrial atmosphere. In spite of the strange quality of all about us, I felt as adventurous and experimental as a Cockney placed for the first time among mountains; and I do not think it occurred to either of us, face to face though we were with the Unknown, to be very greatly afraid.

We were bitten by a spirit of enterprise. We selected a lichenous kopje, perhaps fifteen yards away, and landed neatly on its summit one after the other. "Good!" we cried to each other, "good"; and Cavor made three steps and went off to a tempting slope of snow a good twenty yards and more beyond. I stood for a moment struck by the grotesque effect of his soaring figure, his dirty cricket cap and spiky hair, his little round body, his arms and his knickerbockered legs tucked up tightly against the weird spaciousness of the lunar scene. A gust of laughter seized me, and then I stepped off to follow. Plump! I dropped beside him.

We made a few Gargantuan strides, leaped three or four times more, and sat down at last in a lichenous hollow. Our lungs were painful. We sat holding our sides and recovering our breath, looking appreciation at each other. Cavor panted something about "amazing sensations." And then came a thought into my head. For the moment it did not seem a particularly appalling thought, simply a natural question arising out of the situation.

"By the way," I said, "where exactly is the sphere?"

Cavor looked at me. "Eh?"

The full meaning of what we were saying struck me sharply.

"Cavor!" I cried, laying a hand on his arm, "where is the sphere?"

CHAPTER NINE

LOST MEN IN THE MOON

His face caught something of my dismay. He stood up and stared about him at the scrub that fenced us in and rose about us, straining upwards in a passion of growth. He put a dubious hand to his lips. He spoke with a sudden lack of assurance. "I think," he said slowly, "we left it . . . somewhere . . . about *there*."

He pointed a hesitating finger that wavered in an arc.

"I'm not sure." His look of consternation deepened. "Anyhow," he said, with his eyes on me, "it can't be far."

We had both stood up. We made unmeaning ejaculations.

All about us on the sunlit slopes frothed and swayed the darting shrubs, the swelling cactus, the creeping lichens, and wherever the shade remained the snowdrifts lingered. North, south, east and west spread an identical monotony of unfamiliar forms. And somewhere, buried already among this tangled confusion, was our sphere, our home, our only provision, our only hope of escape from this fantastic wilderness of ephemeral growths into which we had come.

"I think, after all," he said, pointing suddenly, "it might be over there."

"No," I said. "We have turned in a curve. See! here is the mark of my heels. It's clear the thing must be more to the eastward, much more. No! the sphere must be over there."

"I *think*," said Cavor, "I kept the sun upon my right all the time."

"Every leap, it seems to me," I said, "my shadow flew before me."

We stared into each other's eyes. The area of the crater had become enormously vast to our imaginations, the growing thickets already impenetrably dense.

"Good heavens! What fools we have been!"

"It's evident that we must find it again," said Cavor, "and that soon. The sun grows stronger. We should be fainting with the heat already if it wasn't so dry. And . . . I'm hungry."

I stared at him. I had not suspected this aspect of the matter before. But it came to me at once—a positive craving. "Yes," I said with emphasis, "I am hungry, too."

He stood up with a look of active resolution. "Certainly we must find the sphere."

As calmly as possible we surveyed the interminable reefs and thickets that formed the floor of the crater, each of us weighing in silence the chances of our finding the sphere before we were overtaken by heat and hunger.

"It can't be fifty yards from here," said Cavor, with indecisive gestures. "The only thing is to beat round about until we come upon it."

"That is all we can do," I said, without any alacrity to begin our hunt. "I wish this confounded spike bush did not grow so fast!"

"That's just it," said Cavor. "But it was lying on a bank of snow."

I stared about me in the vain hope of recognising some knoll or shrub that had been near the sphere. But everywhere was a confusing sameness, everywhere the aspiring bushes, the distending fungi, the dwindling snow-banks, steadily and inevitably changed. The sun scorched and stung; the faintness of an unaccountable hunger mingled with our infinite perplexity. And even as we stood there, confused and lost amidst unprecedented things, we became aware for the first time of a sound upon the moon other than the stir of the growing plants, the faint sighing of the wind, or those that we ourselves had made.

Boom . . . Boom . . . Boom . . .

It came from beneath our feet, a sound in the ground. We seemed to hear it with our feet as much as with our ears. Its dull resonance was muffled by distance, thick with the quality of intervening substance. No sound that I can imagine could have astonished us more, nor have changed more completely the quality of things about us. For this sound, rich, slow, and deliberate, seemed to us like the striking of some gigantic buried clock.

Boom . . . Boom . . . Boom . . .

Sound suggestive of still cloisters, of sleepless nights in crowded cities, of vigils and the awaited hour, of all that is orderly and methodical in life, booming out pregnant and mysterious in this fantastic desert! To the eye everything was unchanged; the desolation of bushes and cacti waving silently in the wind, stretched unbroken to the distant cliffs; the still, dark sky was empty overhead, and the hot sun hung and burned. And through it all, a warning, a threat, throbbed this enigma of sound.

Boom . . . Boom . . . Boom . . .

We questioned each other in faint and faded voices, "A clock?"

"Like a clock!"

"What is it?"

"What can it be?"

"Count," was Cavor's belated suggestion, and at that word the striking ceased.

The silence, the rhythmic disappointment of the silence, came as a fresh shock. For a moment one could doubt whether one had ever heard a sound. Or whether it might not still be going on! Had I indeed heard a sound?

I felt the pressure of Cavor's hand upon my arm. He spoke in an undertone as if he feared to wake some sleeping thing. "Let us keep together," he whispered, "and look for the sphere. We must get back to the sphere. This is beyond our understanding."

"Which way shall we go?"

He hesitated. An intense persuasion of presences, of unseen things about us and near us, dominated our minds. What could they be? Where could they be? Was this arid desolation, alternately frozen and scorched, only the outer rind and mask of some subterranean world? And if so, what sort of world? What sort of inhabitants might it not presently disgorge upon us?

And then stabbing the aching stillness, as vivid and sudden as an unexpected thunder-clap, came a clang and rattle as though great gates of metal had suddenly been flung apart.

It arrested our steps. We stood gaping helplessly. Then Cavor stole towards me.

"I do not understand!" he whispered, close to my face. He waved his hand vaguely skywards, the vague suggestions of still vaguer thoughts.

"A hiding-place! If anything came——"

I looked about us. I nodded my head in assent to him.

We started off, moving stealthily, with the most exaggerated precautions against noise. We went towards a thicket of scrub. A clangour as of hammers flung about a boiler hastened our steps. "We must crawl," whispered Cavor.

The lower leaves of the bayonet plants, already overshadowed by the newer ones above, were beginning to wilt and shrivel so that we could thrust our way among the thickening stems without any serious injury. A stab in the face or arm we did not heed. At the heart of the thicket I stopped and stared panting into Cavor's face.

"Subterranean," he whispered. "Below."

"They may come out."

"We must find the sphere!"

"Yes," I said, "but how?"

"Crawl till we come to it."

"But if we don't?"

"Keep hidden. See what they are like."

"We will keep together," said I.

He thought. "Which way shall we go?"

"We must take our chance."

We peered this way and that. Then very circumspectly we began to crawl through the lower jungle, making so far as we could judge a circuit, halting now at every waving fungus, at every sound, intent only on the sphere from which we had so foolishly emerged. Ever and again from out of the ground beneath us came concussions, beatings, strange, inexplicable, mechanical sounds, and once and then again we thought we

heard something, a faint rattle and tumult, borne to us through the air. But fearful as we were we dared attempt no vantage-point to survey the crater. For long we saw nothing of the beings whose sounds were so abundant and insistent. But for the faintness of our hunger and the drying of our throats that crawling would have had the quality of a very vivid dream. It was so absolutely unreal. The only element with any touch of reality was these sounds.

Picture it to yourself. About us the dreamlike jungle, with the silent bayonet leaves darting overhead, and the silent, vivid, sun-splashed lichens under our hands and knees, waving with the vigour of their growth as a carpet waves when the wind gets beneath it. Ever and again one of the bladder fungi, bulging and distending under the sun, loomed upon us. Ever and again in vivid colour some novel shape obtruded. The very cells that built up these plants were as large as my thumb, like beads of coloured glass. And all these things were saturated in the unmitigated glare of the sun, were seen against a sky that was bluish-black and spangled still, in spite of the sunlight, with a few surviving stars. Strange! the very forms and texture of the stones were strange. It was all strange: the feeling of one's body was unprecedented, every other movement ended in a surprise. The breath sucked thin in one's throat, the blood flowed through one's ears in a throbbing tide, thud, thud, thud, thud . . .

And ever and again came gusts of turmoil, hammering, the clanging and throb of machinery, and presently—the bellowing of great beasts!

CHAPTER TEN

THE MOONCALF PASTURES

So we two poor terrestrial castaways, lost in that wild-growing moon jungle, crawled in terror before the sounds that had come upon us. We crawled as it seemed a long time before we saw either Selenite or mooncalf, though we heard the bellowing and gruntulous noises of these latter continually drawing nearer to us. We crawled through stony ravines, over snow slopes, amidst fungi that ripped like thin bladders at our thrust, emitting a watery humour; over a perfect pavement of things like puff-balls and beneath interminable thickets of scrub. And ever more hopelessly our eyes sought for our abandoned sphere. The noise of the mooncalves would at times be a vast, flat, calf-like sound, at times it rose to an amazed and wrathy bellowing, and again it would become a clogged, bestial sound as though these unseen creatures had sought to eat and bellow at the same time.

Our first view was but an inadequate, transitory glimpse, yet none the less disturbing because it was incomplete. Cavor was crawling in front at the time, and he first was aware of their proximity. He stopped, arresting me with a single gesture.

A crackling and smashing of the scrub appeared to be advancing directly upon us, and then, as we squatted close and endeavoured to judge of the nearness and direction of this noise, there came a terrific bellow behind us, so close and vehement that the tops of the bayonet scrub bent before it, and one felt the breath of it hot and moist. Turning about we saw indistinctly through a crowd of swaying stems the mooncalf's shining sides and the long line of its back looming against the sky.

Of course it is hard for me now to say how much I saw at that time, because my impressions were corrected by subsequent observation. First of all was its enormous size: the girth of its body was some fourscore feet, its length perhaps two hundred. Its sides rose and fell with its laboured breathing. I perceived that its gigantic flabby body lay along the ground and that its skin was of corrugated white, dappling into blackness along the backbone. But of its feet we saw nothing. I think also that we saw then the profile at least of the almost brainless head, with its fat-encumbered neck, its slobbering, omnivorous mouth, its little nostrils, and tight-shut eyes. (For the mooncalf invariably shuts its eyes in the presence of the sun.) We had a glimpse of a vast red pit as it opened its mouth to bleat and bellow again, we had a breath from the pit, and then the monster heeled over like a ship, dragged forward along the ground, creasing all his leathery

skin, rolled again, and so wallowed past us, smashing a path amidst the scrub, and was speedily hidden from our eyes by the dense interlacings beyond. Another appeared more distantly, and then another, and then, as though he was driving these animated lumps of provender to their pasture, a Selenite came momentarily into view. My grip upon Cavor's foot became convulsive at the sight of him, and we remained motionless and peering long after he had passed out of our range.

By contrast with the mooncalves he seemed a trivial being, a mere ant, scarcely five feet high. He was wearing garments of some leathery substance so that no portion of his actual body appeared—but of this of course we were entirely ignorant. He presented himself, therefore, as a compact bristling creature, having much of the quality of a complicated insect, with whip-like tentacles, and a clanging arm projecting from his shining cylindrical body-case. The form of his head was hidden by his enormous, many-spiked helmet—we discovered afterwards that he used the spikes for prodding refractory mooncalves—and a pair of goggles of darkened glass set very much at the side gave a bud-like quality to the metallic apparatus that covered his face. His arms did not project beyond his body-case, and he carried himself upon short legs that wrapped though they were in warm coverings, seemed to our terrestrial eyes inordinately flimsy. They had very short thighs, very long shanks, and little feet.

In spite of his heavy-looking clothing he was progressing with what would be from the terrestrial point of view very considerable strides, and his clanging arm was busy. The quality of his motion during the instant of his passing suggested haste and a certain anger, and soon after we had lost sight of him we heard the bellow of a mooncalf change abruptly into a short, sharp squeal, followed by the scuffle of its acceleration. And gradually that bellowing receded, and then came to an end, as if the pastures sought had been reached.

We listened. For a space the moon world was still. But it was some time before we resumed our crawling search for the vanished sphere.

When next we saw mooncalves they were some little distance away from us, in a place of tumbled rocks. The sloping surfaces of the rocks were thick with a speckled green plant, growing in dense, mossy clumps, upon which these creatures were browsing. At the sight of them we stopped on the margin of the reeds amidst which we were crawling, peering through at them and looking round for a second glimpse of a Selenite. They lay against their food like stupendous slugs, huge, greasy hulls, eating greedily and noisily, with a sort of sobbing avidity. They seemed monsters of mere fatness, clumsy and overwhelmed to a degree that would make a Smithfield ox seem a model of agility. Their busy, writhing,

chewing mouths, their closed eyes, together with the appetising sound of their munching, made up an effect of animal enjoyment that was singularly stimulating to our empty frames.

"Hogs!" said Cavor, with unusual passion. "Disgusting hogs!" and after one glare of angry envy crawled on through the bushes to our right. I stayed long enough to see that the speckled plant was quite hopeless for human nourishment, then crawled after him, nibbling a quill of it between my teeth.

Presently we were arrested again by the proximity of a Selenite, and this time we were able to observe him more exactly. Now we could see that the Selenite covering was indeed clothing, and not a sort of crustacean integument. He was similar in costume to the former one we had glimpsed, except that ends of something like wadding were protruding from his neck, and he stood on a promontory of rock and moved his head this way and that as though he was surveying the crater. We lay quite still, fearing to attract his attention if we moved, and after a time he turned about and disappeared.

We came upon another drove of mooncalves bellowing up a ravine, and then we passed over a place of sounds, sounds of beating machinery, as if some huge hall of industry came near the surface there. And while these sounds were still about us we came to the edge of a great open space, perhaps two hundred yards in diameter, and perfectly level. Save for a few lichens that advanced from its margin, this space was bare, and presented a powdery surface of a dusty yellow colour. We were afraid to strike out across this space, but as it presented less obstruction to our crawling than the scrub, we went down upon it and began very circumspectly to skirt its edge.

For a little while the noises below ceased, and everything, save for the faint stir of the growing vegetation, was very still. Then abruptly there began an uproar, louder, more vehement, and nearer than any we had so far heard. Of a certainty it came from below. Instinctively we crouched as flat as we could, ready for a prompt plunge into the thicket beside us. Each knock and throb seemed to vibrate through our bodies. Louder grew this throbbing and beating, and that irregular vibration increased until the whole moon world seemed to be jerking and pulsing.

"Cover," whispered Cavor, and I turned towards the bushes.

At that instant came a thud like the thud of a gun, and then a thing happened—it still haunts me in my dreams. I had turned my head to look at Cavor's face, and thrust out my hands in front of me as I did so. My hand met nothing! I plunged suddenly into a bottomless hole!

My chest hit something hard, and I found myself with my chin on the edge of an unfathomable abyss that had suddenly

opened beneath me, my hand extended stiffly into the void. The whole of that flat circular area was no more than a gigantic lid, that was now sliding sideways from off the pit it had covered into a slot prepared for it.

Had it not been for Cavor I think I should have remained rigid, hanging over this margin and staring into the enormous gulf below until at last the edges of the slot scraped me off and hurled me into its depths. But Cavor had not received the shock that had paralysed me. He had been a little distance from the edge when the lid had first opened, and, perceiving the peril that held me helpless, gripped my legs and pulled me backward. I came into a sitting position, crawled away from the edge for a space on all-fours, then staggered up and ran after him across the thundering, quivering sheet of metal. It seemed to be swinging open with a steadily-accelerated velocity, and the bushes in front of me shifted sideways as I ran.

I was none too soon. Cavor's back vanished amidst the bristling thicket, and as I scrambled up after him the monstrous valve came into its position with a clang. For a long time we lay panting, not daring to approach the pit.

But at last, very cautiously, and bit by bit, we crept into a position from which we could peer down. The bushes about us creaked and waved with the force of a breeze that was blowing down the shaft. We could see nothing at first except smooth, vertical walls descending at last into an impenetrable black. And then gradually we became aware of a number of very faint and little lights going to and fro.

For a time that stupendous gulf of mystery held us so that we forgot even our sphere. In times as we grew accustomed to the darkness we could make out very small dim illusive shapes moving about among those needle-point illuminations. We peered, amazed and incredulous, understanding so little that we could find no words to speak. We could distinguish nothing that would give us a clue to the meaning of the faint shapes we saw.

"What can it be?" I asked; "what can it be?"

"The engineering! . . . They must live in these caverns during the night and come out during the day."

"Cavor!" I said. "Can they be—*that*—it was something like—men?"

"No. *That* was not a man."

"We dare risk nothing!"

"We dare do nothing until we find the sphere," he assented with a groan, and stirred himself to move. He stared about him for a space, sighed, and indicated a direction. We struck out through the jungle. For a time we crawled resolutely, then with diminishing vigour. Presently among great shapes of flabby purple there came a noise of trampling and of cries about us. We lay close, and for a long time the sounds went to and fro and very near. But this time we saw nothing. I

tried to whisper to Cavor that I could hardly go without food much longer, but my mouth had become too dry for whispering.

"Cavor," I said, "I must have food."

He turned a face full of dismay towards me. "It's a case for holding out," he said.

"But I *must*," I said; "and look at my lips!"

"I've been thirsty some time."

"If only some of that snow had remained!"

"It's clean gone! We're driving from Arctic to tropical at the rate of a degree a minute. . . ."

I gnawed my hand.

"The sphere!" he said. "There is nothing for it but the sphere." We roused ourselves to another spurt of crawling. My mind ran entirely on edible things, on the hissing profundity of summer drinks; more particularly I craved for beer. I was haunted by the memory of the eighteen-gallon cask that had swaggered in my Lympne cellar. I thought of the adjacent larder, and especially of steak and kidney pie—tender steak and plenty of kidney, and rich, thick gravy between. Ever and again I was seized with fits of hungry yawning. We came to flat places overgrown with fleshy red things, monstrous coral-line growths; as we pushed against them they snapped and broke. I noted the quality of the broken surfaces. The confounded stuff certainly looked of a biteable texture.

I picked up a fragment and sniffed at it.

"Cavor," I said, in a hoarse undertone.

He glanced at me with his face screwed up. "Don't," he said. I put down the fragment, and we crawled on through this tempting fleshiness for a space.

"Cavor," I asked, "why not?"

"Poison," I heard him say, but he did not look round.

We crawled some way before I decided.

"I'll chance it," said I.

He made a belated gesture to prevent me. I stuffed my mouth full. He crouched, watching my face, his own twisted into the oddest expression. "It's good," I said.

"Oh, Lord!" he cried.

He watched me munch, his face wrinkled between desire and disapproval, then suddenly succumbed to appetite, and began to tear off huge mouthfuls. For a time we did nothing but eat.

The stuff was not unlike a terrestrial mushroom, only it was much laxer in texture, and as one swallowed it, it warmed the throat. At first we experienced a mere mechanical satisfaction in eating. Then our blood began to run warmer, and we tingled at the lips and fingers, and then new and slightly irrelevant ideas came bubbling up in our minds.

"It's good," said I. "Infernally good! What a home

for our surplus population! Our poor surplus population," and I broke off another large portion.

It filled me with a curiously benevolent satisfaction that there was such good food in the moon. The depression of my hunger gave way to an irrational exhilaration. The dread and discomfort in which I had been living vanished entirely. I perceived the moon no longer as a planet from which I most earnestly desired the means of escape, but as a possible refuge for human destitution. I think I forgot the Selenites, the mooncalves, the lid, and the noises completely as soon as I had eaten that fungus.

Cavor replied to my third repetition of my "surplus population" remark with similar words of approval. I felt that my head swam, but I put this down to the stimulating effect of food after a long fast. "Ess'lent discov'ry, yours, Cavor," said I. "Se'nd on'y to the 'tato."

"Wha jer mean?" asked Cavor. "'Scovery of the moon—se'nd on'y to the tato?"

I looked at him, shocked at his suddenly hoarse voice and by the badness of his articulation. It occurred to me in a flash that he was intoxicated, possibly by the fungus. It also occurred to me that he erred in imagining that he had discovered the moon—he had not discovered it, he had only reached it. I tried to lay my hand on his arm and explain this to him, but the issue was too subtle for his brain. It was also unexpectedly difficult to express. After a momentary attempt to understand me—I remember wondering if the fungus had made my eyes as fishy as his—he set off upon some observations on his own account.

"We are," he announced, with a solemn hiccup, "the creashurs o' what we eat and drink."

He repeated this, and as I was now in one of my subtle moods I determined to dispute it. Possibly I wandered a little from the point. But Cavor certainly did not attend at all properly. He stood up as well as he could, putting a hand on my head to steady himself, which was disrespectful, and stood staring about him, quite devoid now of any fear of the moon beings.

I tried to point out that this was dangerous, for some reason that was not perfectly clear to me; but the word "dangerous" had somehow got mixed with "indiscreet," and came out rather more like "injurious" than either, and after an attempt to disentangle them I resumed my argument, addressing myself principally to the unfamiliar but attentive coralline growths on either side. I felt that it was necessary to clear up this confusion between the moon and a potato at once—I wandered into a long parenthesis on the importance of precision of definition in argument. I did my best to ignore the fact that my bodily sensations were no longer agreeable.

In some way that I have now forgotten my mind was led back to projects of colonisation. "We must annex this

moon," I said. "There must be no shilly-shally. This is part of the White Man's Burden. Cavor—we are—*hic*—Satap—mean Satraps! Nempire Cæsar never dreamt. B'in all the newspapers. Cavorecia. Bedfordecia. Bedfordecia. Hic—Limited. Mean—unlimited! Practically."

Certainly I was intoxicated. I embarked upon an argument to show the infinite benefits our arrival would confer upon the moon. I involved myself in a rather difficult proof that the arrival of Columbus was, after all, beneficial to America. I found I had forgotten the line of argument I had intended to pursue, and continued to repeat "sim'lar to C'lumbus" to fill up time.

From that point my memory of the action of that abominable fungus becomes confused. I remember vaguely that we declared our intention of standing no nonsense from any confounded insects, that we decided it ill became men to hide shamefully upon a mere satellite, that we equipped ourselves with huge armfuls of the fungi—whether for missile purposes or not I do not know—and, heedless of the stabs of the bayonet shrub, we started forth into the sunshine.

Almost immediately we must have come upon the Selenites. There were six of them, and they were marching in single file over a rocky place, making the most remarkable piping and whining sounds. They all seemed to become aware of us at once, all instantly became silent and motionless like animals, with their faces turned towards us.

For a moment I was sobered.

"Insects," murmured Cavor, "insects!—and they think I'm going to crawl about on my stomach—on my vertebrated stomach!

"Stomach," he repeated, slowly, as though he chewed the indignity.

Then suddenly, with a sort of fury, he made three vast strides and leaped towards them. He leaped badly; he made a series of somersaults in the air, whirled right over them, and vanished with an enormous splash amidst the cactus bladders. What the Selenites made of this amazing, and to my mind undignified, irruption from another planet, I have no means of guessing. I seem to remember the sight of their backs as they ran in all directions—but I am not sure. All these last incidents before oblivion came are vague and faint in my mind. I know I made a step to follow Cavor, and tripped and fell headlong among the rocks. I was, I am certain, suddenly and vehemently ill. I seem to remember a violent struggle, and being gripped by metallic clasps. . . .

My next clear recollection is that we were prisoners at we knew not what depth beneath the moon's surface; we were in darkness amidst strange, distracting noises; our bodies covered with scratches and bruises, and our heads racked with pain.

CHAPTER ELEVEN

THE SELENITE'S FACE

I FOUND myself sitting crouched together in a tumultuous darkness. For a long time I could not understand where I was nor how I had come to this perplexity. I thought of the cupboard into which I had been thrust at times when I was a child, and then of a very dark and noisy bedroom in which I had slept during an illness. But these sounds about me were not noises I had known, and there was a thin flavour in the air like the wind of a stable. Then I supposed we must still be at work upon the sphere, and that somehow I had got into the cellar of Cavor's house. I remembered we had finished the sphere, and fancied I must still be in it and travelling through space.

"Cavor," I said, "cannot we have some light?"

There came no answer.

"Cavor!" I insisted.

I was answered by a groan. "My head!" I heard him say, "my head!"

I attempted to press my hands to my brow, which ached, and discovered they were tied together. This startled me very much. I brought them up to my mouth and felt the cold smoothness of metal. They were chained together. I tried to separate my legs and made out they were similarly fastened, and also I was fastened to the ground by a much thicker chain about the middle of my body.

I was more frightened than I had yet been by anything in all our strange experiences. For a time I tugged silently at my bonds. "Cavor!" I cried out, sharply, "why am I tied? Why have you tied me hand and foot?"

"I haven't tied you," he answered. "It's the Selenites."

The Selenites! My mind hung on that for a space. Then my memories came back to me: the snowy desolation, the thawing of the air, the growth of the plants, our strange hopping and crawling among the rocks and vegetation of the crater. All the distress of our frantic search for the sphere returned to me. . . . Finally the opening of the great lid that covered the pit!

Then as I strained to trace our later movements down to our present plight the pain in my head became intolerable. I came to an insurmountable barrier, an obstinate blank.

"Cavor!"

"Yes."

"Where are we?"

"How should I know?"

"Are we dead?"

"What nonsense!"

"They've got us, then!"

He made no answer but a grunt. The lingering traces of the poison seemed to make him oddly irritable.

"What do you mean to do?"

"How should I know what to do?"

"Oh, very well," said I, and became silent. Presently I was roused from a stupor. "Oh, Lord!" I cried, "I wish you'd stop that buzzing."

We lapsed into silence again, listening to the dull confusion of noises, like the muffled sounds of a street or factory, that filled our ears. I could make nothing of it; my mind pursued first one rhythm and then another, and questioned it in vain. But after a long time I became aware of a new and sharper element, not mingling with the rest, but standing out, as it were, against that cloudy background of sound. It was a series of little definite sounds, tappings and rubbings like a loose spray of ivy against a window or a bird moving about upon a box. We listened and peered about us, but the darkness was a velvet pall. There followed a noise like the subtle movement of the wards of a well-oiled lock. And then there appeared before me, hanging as it seemed in an immensity of black, a thin bright line.

"Look!" whispered Cavor, very softly.

"What is it?"

"I don't know."

We stared.

The thin bright line became a band, broader and paler. It took upon itself the quality of a bluish light falling upon a whitewashed wall. It ceased to be parallel sided; it developed a deep indentation on one side. I turned to remark this to Cavor, and was amazed to see his ear in a brilliant illumination—all the rest of him in shadow. I twisted my head round as well as my bonds would permit. "Cavor!" I said, "it's behind!"

His ear vanished—gave place to an eye!

Suddenly the crack that had been admitting the light broadened out and revealed itself as the space of an opening door. Beyond was a sapphire vista, and in the doorway stood a grotesque outline silhouetted against the glare.

We both made convulsive efforts to turn, and, failing, sat staring over our shoulders at this. My first impression was of some clumsy quadruped with lowered head. Then I perceived it was the slender, pinched body and short and extremely attenuated bandy legs of a Selenite, with his head depressed between his shoulders. He was without the helmet and body-covering they wear upon the exterior.

He was a blank black figure to us, but instinctively our imaginations supplied features to his very human outline. I at least took it instantly that he was somewhat hunchbacked, with a high forehead and long features.

He came forward three steps and paused for a time. His movements seemed absolutely noiseless. Then he came forward again. He walked like a bird—his feet fell one in front of the other. He stepped out of the ray of light that came through the doorway, and it seemed that he vanished altogether in the shadow.

For a moment my eyes sought him in the wrong place, and then I perceived him standing facing us both in the full light. Only the human features I had attributed to him were not there at all!

Of course I ought to have expected that, only I did not. It came to me as an absolute, for a moment an overwhelming, shock. It seemed as though it wasn't a face; as though it must needs be a mask, a horror, a deformity that would presently be disavowed or explained. There was no nose, and the thing had bulging eyes at the side—in the silhouette I had supposed they were ears . . . I have tried to draw one of these heads, but I cannot.

There was a mouth, downwardly curved, like a human mouth in a face that stared ferociously.

The neck on which the head was poised was jointed in three places, almost like the short joints in the leg of a crab. The joints of the limbs I could not see because of the puttee-like straps in which they were swathed, and which formed the only clothing this being wore.

At the time my mind was taken up by the mad impossibility of the creature. I suppose he also was amazed—and with more reason, perhaps, for amazement than we. Only, confound him, he did not show it. We did at least know what had brought about this meeting of incompatible creatures. But conceive how it would seem to decent Londoners, for example, to come upon a couple of living things, as big as men and absolutely unlike any other earthly animals, careering about among the sheep in Hyde Park!

It must have taken him like that.

Imagine us! We were bound hand and foot, fagged and filthy, our beards two inches long, our faces scratched and bloody. Cavor you must imagine in his knickerbockers (torn in several places by the bayonet scrub), his Jaeger shirt and old cricket cap, his wiry hair wildly disordered, a tail to every quarter of the heavens. In that blue light his face did not look red, but very dark; his lips and the drying blood upon his hands seemed black. If possible I was in a worse plight than he, on account of the yellow fungus into which I had jumped. Our jackets were unbuttoned, and our shoes had been taken off and lay at our feet. We were sitting with our backs to the queer, bluish light peering at such a monster as Dürer might have invented.

Cavor broke the silence, started to speak, went hoarse, and cleared his throat. Outside began a terrific bellowing,

as of a mooncalf in trouble. It ended in a shriek, and everything was still again.

Presently the Selenite turned about, flickered into the shadow, stood for a moment retrospective at the door, and then closed it on us, and once more we were in that murmurous mystery of darkness into which we had awakened.

CHAPTER TWELVE

MR. CAVOR MAKES SOME SUGGESTIONS

For a time neither of us spoke. To focus all the things we had brought upon ourselves seemed beyond my mental powers.

"They've got us," I said at last.

"It was that fungus."

"Well, if I hadn't taken it we should have fainted and starved."

"We might have found the sphere."

I lost my temper at his persistence and swore to myself. For a time we hated each other in silence. I drummed with my fingers on the floor between my knees and ground the links of my fetters together. Presently I was forced to talk again.

"What do you make of it, anyhow?" I asked humbly.

"They are reasonable creatures—they can make things and do things. Those lights we saw. . . ."

He stopped. It was clear he could make nothing of it.

When he spoke again it was to confess. "After all, they are more human than we had a right to expect. I suppose——"

He stopped irritatingly.

"Yes?"

"I suppose anyhow—on any planet, where there is an intelligent animal, it will carry its brain case upward, and have hands and walk erect. . . ."

Presently he broke away in another direction.

"We are some way in," he said. "I mean—perhaps a couple of thousand feet or more."

"Why?"

"It's cooler. And our voices are so much louder. That faded quality—it has altogether gone. And the feeling in one's ears and throat."

I had not noted that, but I did now.

"The air is denser. We must be some depth—a mile even we may be—inside the moon."

"We never thought of a world inside the moon."

"No."

"How could we?"

"We might have done. Only—one gets into habits of mind."

He thought for a time.

"Now," he said, "it seems such an obvious thing. Of course! The moon must be enormously cavernous with an atmosphere within, and at the centre of its caverns a sea. One knew that the moon had a lower specific gravity than the earth; one knew that it had little air or water outside;

one knew, too, that it was sister planet to the earth and that it was unaccountable that it should be different in composition. The inference that it was hollowed out was as clear as day. And yet one never saw it as a fact. Kepler, of course——" His voice had the interest now of a man who has discovered a pretty sequence of reasoning.

"Yes," he said, "Kepler, with his *subvolvani*, was right after all."

"I wish you had taken the trouble to find that out before we came," I said.

He answered nothing, buzzing to himself softly as he pursued his thoughts. My temper was going. "What do you think has become of the sphere, anyhow?" I asked.

"Lost," he said, like a man who answers an uninteresting question.

"Among those plants?"

"Unless they find it."

"And then?"

"How can I tell?"

"Cavor," I said, with a sort of hysterical bitterness, "things look bright for my Company."

He made no answer.

"Good Lord!" I exclaimed. "Just think of all the trouble we took to get into this pickle! What did we come for? What are we after? What was the moon to us, or we to the moon? We wanted too much, we tried too much. We ought to have started the little things first. It was you proposed the moon! Those Cavorite spring blinds! I am certain we could have worked them for terrestrial purposes. Certain! Did you really understand what I proposed? A steel cylinder——"

"Rubbish!" said Cavor.

We ceased to converse.

For a time Cavor kept up a broken monologue without much help from me.

"If they find it," he began; "if they find it . . . what will they do with it? Well, that's a question! It may be that's *the* question. They won't understand it, anyhow. If they understood that sort of thing they would have come long since to the earth. Would they? Why shouldn't they? But they would have sent something—— They couldn't keep their hands off such a possibility. No! But they will examine it. Clearly they are intelligent and inquisitive. They will examine it—get inside it—trifle with the studs. Off! . . . That would mean the moon for us for all the rest of our lives. Strange creatures, strange knowledge . . ."

"As for strange knowledge——!" said I, and language failed me.

"Look here, Bedford," said Cavor. "You came on this expedition of your own free will."

"You said to me—'call it prospecting.'"

"There are always risks in prospecting."

"Especially when you do it unarmed and without thinking out every possibility."

"I was so taken up with the sphere. The thing rushed on us and carried us away."

"Rushed on *me*, you mean."

"Rushed on me just as much. How was I to know when I set to work on molecular physics that the business would being me here—of all places?"

"It's this accursed Science," I cried. "It's the very Devil. The mediæval priests and persecutors were right, and the moderns are all wrong. You tamper with it and it offers you gifts. And directly you take them it knocks you to pieces in some unexpected way. Old passions and new weapons—now it upsets your religion, now it upsets your social ideas, now it whirls you off to desolation and misery!"

"Anyhow, it's no use your quarrelling with me now. These creatures—these Selenites—or whatever we choose to call them, have got us tied hand and foot. Whatever temper you choose to go through with it in, you will have to go through with it. . . . We have experiences before us that will need all our coolness."

He paused as if he required my assent. But I sat sulking. "Confound your science!" I said.

"The problem is communication. Gestures, I fear, will be different. Pointing, for example. No creatures but men and monkeys point."

That was too obviously wrong for me. "Pretty nearly every animal," I cried, "points with its eyes or nose."

Cavor meditated over that. "Yes," he said at last, "and we don't. There are such differences! Such differences!

"One might . . . But how can I tell? There is speech. The sounds they make, a sort of fluting and piping. I don't see how we are to imitate that. Is it their speech, that sort of thing? They may have different senses, different means of communication. Of course they are minds and we are minds—there must be something in common. Who knows how far we may not get to an understanding?"

"The things are outside us," I said. "They're more different from us than the strangest animals on earth. They are a different clay. What is the good of talking like this?"

Cavor thought. "I don't see that. Where there are minds, they will have something similar—even though they have been evolved on different planets. Of course, if it was a question of instinct—if we or they were no more than animals——"

"Well, are they? They're much more like ants on their hind legs than human beings, and who ever got to any sort of understanding with ants?"

"But these machines and clothing! No, I don't hold with you, Bedford. The difference is wide——"

"It's insurmountable."

"The resemblance must bridge it. I remember reading once a paper by the late Professor Galton on the possibility of communication between the planets. Unhappily at that time it did not seem probable that it would be of any material benefit to me, and I fear I did not give it the attention I should have done—in view of this state of affairs. Yet . . . now, let me see!

"His idea was to begin with those broad truths that must underlie all conceivable mental existences and establish a basis on those. The great principles of geometry, to begin with. He proposed to take some leading proposition of Euclid's, and show by construction that its truth was known to us; to demonstrate, for example, that the angles at the base of an isosceles triangle are equal, and that if the equal sides be produced the angles on the other side of the base are equal also; or that the square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the two other sides. By demonstrating our knowledge of these things we should demonstrate our possession of a reasonable intelligence. . . . Now, suppose I . . . I might draw the geometrical figure with a wet finger or even trace it in the air . . ."

He fell silent. I sat meditating his words. For a time his wild hope of communication, of interpretation with these weird beings, held me. Then that angry despair that was a part of my exhaustion and physical misery resumed its sway. I perceived with a sudden novel vividness the extraordinary folly of everything I had ever done. "Ass!" I said, "oh, ass, unutterable ass . . . I seem to exist only to go about doing preposterous things. . . . Why did we ever leave the sphere? . . . Hopping about looking for patents and concessions in the craters of the moon! . . . If only we had had the sense to fasten a handkerchief to a stick to show where we had left the sphere!"

I subsided fuming.

"It is clear," meditated Cavor, "they are intelligent. One can hypothecate certain things. As they have not killed us at once they must have ideas of mercy. Mercy! At any rate of restraint. Possibly of intercourse. They may meet us. And this apartment and the glimpses we had of its guardian! These fetters! A high degree of intelligence. . . ."

"I wish to Heaven," cried I, "I'd thought even twice! Plunge after plunge. First one fluky start and then another. It was my confidence in you. Why didn't I stick to my play? That was what I was equal to. That was my world and the life I was made for. I could have finished that play. I'm certain . . . it was a good play. I had the scenario as good as done. Then . . . Conceive it! Leaping to the moon!

Practically—I've thrown my life away! That old woman in the inn near Canterbury had better sense."

I looked up, and stopped in mid-sentence. The darkness had given place to that bluish light again. The door was opening, and several noiseless Selenites were coming into the chamber. I became quite still, staring at their grotesque faces.

Then suddenly my sense of disagreeable strangeness changed to interest. I perceived that the foremost and second carried bowls. One elemental need at least our minds could understand in common. They were bowls of some metal that, like our fetters, looked dark in that bluish light; and each contained a number of whitish fragments. All the cloudy pain and misery that oppressed me rushed together and took the shape of hunger. I eyed these bowls wolfishly. It seemed that at the end of the arms that lowered one towards me were not hands, but a sort of flap and thumb, like the end of an elephant's trunk.

The stuff in the bowl was loose in texture and whitish-brown in colour—rather like lumps of some cold soufflé, and it smelt faintly like mushrooms. From a partly-divided carcass of a mooncalf that we presently saw I am inclined to believe it must have been mooncalf flesh.

My hands were so tightly chained that I could barely contrive to reach the bowl, but when they saw the effort I made two of them dexterously released one of the turns about my wrist. Their tentacle hands were soft and cold to my skin. I immediately seized a mouthful of the food. It had the same laxness in texture that all organic structures seem to have upon the moon; it tasted rather like a *gauffre*, or a damp meringue, but in no way was it disagreeable. I took two other mouthfuls. "I wanted—food!" said I, tearing off a still larger piece. . . .

For a time we ate with an utter absence of self-consciousness. We ate and presently drank like tramps in a soup kitchen. Never before, nor since, have I been hungry to the ravenous pitch, and save that I have had this very experience I could never have believed that a quarter of a million of miles out of our proper world, in utter perplexity of soul, surrounded, watched, touched by beings more grotesque and inhuman than the worst creatures of a nightmare, it would be possible for me to eat in utter forgetfulness of all these things. They stood about us, watching us, and ever and again making a slight elusive twittering that stood them, I suppose, in the stead of speech. I did not even shiver at their touch. And when the first zeal of my feeding was over I could note that Cavor too had been eating with the same shameless abandon.

CHAPTER THIRTEEN

EXPERIMENTS IN INTERCOURSE

WHEN at last we had made an end of eating, the Selenites linked our hands closely together again, and then untwisted the chains about our feet and rebound them, so as to give us a limited freedom of movement. Then they unfastened the chains about our waists. To do all this they had to handle us freely, and ever and again one of their queer heads came down close to my face, or a soft tentacle-hand touched my head or neck. I do not remember that I was afraid then or repelled by their proximity. I think that our incurable anthropomorphism made us imagine there were human heads inside their masks. The skin, like everything else, looked bluish, but that was on account of the light, and it was hard and shiny quite in the beetle-wing fashion, not soft or moist or hairy as a vertebrated animal's would be. Along the crest of the head was a low ridge of whitish spines running from back to front, and a much larger ridge curved on each side over the eyes. The Selenite who untied me used his mouth to help his hands.

"They seem to be releasing us," said Cavor. "Remember, we are on the moon! Make no sudden movements!"

"Are you going to try that geometry?"

"If I get a chance. But, of course, they may make an advance first."

We remained passive, and the Selenites having finished their arrangements stood back from us, and seemed to be looking at us. I say seemed to be, because as their eyes were at the sides and not in front one had the same difficulty in determining the direction in which they were looking as one has in the case of a hen or a fish. They conversed with one another in their reedy tones, that seemed to me impossible to imitate or define. The door behind us opened wider, and glancing over my shoulder I saw a vague large space beyond in which a little crowd of Selenites were standing. They seemed a curiously miscellaneous rabble.

"Do they want us to imitate those sounds?" I asked Cavor.

"I don't think so," he said.

"It seems to me that they are trying to make us understand something."

"I can't make anything of their gestures. Do you notice this one, who is worrying with his head like a man with an uncomfortable collar?"

"Let us shake our heads at him."

We did that, and finding it ineffectual, attempted an imitation of the Selenite's movements. That seemed to

interest them. At any rate, they all set up the same movement. But as that seemed to lead to nothing we desisted at last, and so did they, and fell into a piping argument among themselves. Then one of them, shorter and very much thicker than the other, and with a particularly wide mouth, squatted down suddenly beside Cavor, and put his hands and feet in the same posture as Cavor's were bound, and then by a dexterous movement stood up.

"Cavor," I shouted, "they want us to get up!"

He stared open-mouthed. "That's it!" he said.

And with much heaving and grunting, because our hands were tied together, we contrived to struggle to our feet. The Selenites made way for our elephantine heavings, and seemed to twitter more volubly. As soon as we were on our feet the thick-set Selenite came and patted each of our faces with his tentacles, and walked towards the open doorway. That also was plain enough and we followed him. We saw that four of the Selenites standing in the doorway were much taller than the others, and clothed in the same manner as those we had seen in the crater, namely, with spiked, round helmets and cylindrical body-cases, and that each of the four carried a goad, with spike and guard made of that same dull-looking metal as the bowls. These four closed about us, one on either side of each of us, as we emerged from our chamber into the cavern from which the light had come.

We did not get our impression of that cavern all at once. Our attention was taken up by the movements and attitudes of the Selenites immediately about us, and by the necessity of controlling our motion, lest we should startle and alarm them and ourselves by some excessive stride. In front of us was the short, thick-set being who had solved the problem of asking us to get up, moving with gestures that seemed, almost all of them, intelligible to us, inviting us to follow him. His spout-like face turned from one of us to the other with a quickness that was clearly interrogative. For a time, I say, we were taken up with these things.

But at last the great place that formed a background to our movements asserted itself. It became apparent that the source of much at least of the tumult of sounds which had filled our ears ever since we had recovered from the stupefaction of the fungus was a vast mass of machinery in active movement, whose flying and whirling parts were visible indistinctly over the heads and between the bodies of the Selenites who walked about us. And not only did the web of sounds that filled the air proceed from this mechanism, but also the peculiar blue light that irradiated the whole place. We had taken it as a natural thing that a subterranean cavern should be artificially lit, and even now, though the fact was patent to my eyes, I did not really grasp its import until presently the darkness came. The meaning and structure of this huge

apparatus I cannot explain, because we neither of us learnt what it was for or how it worked. One after another, big shafts of metal flung out and up from its centre, their heads travelling in what seemed to me to be a parabolic path ; each dropped a sort of dangling arm as it rose towards the apex of its flight and plunged down into a vertical cylinder, forcing this down before it. About it moved the shapes of tenders, little figures that seemed vaguely different from the beings about us. As each of the three dangling arms of the machine plunged down there was a clank and then a roaring, and out of the top of the vertical cylinder came pouring this incandescent substance, that lit the place and ran over as milk runs over a boiling pot and dripped luminously into a tank of light below. It was a cold blue light, a sort of phosphorescent glow, but infinitely brighter, and from the tanks into which it fell it ran in conduits athwart the cavern.

Thud, thud, thud, thud, came the sweeping arms of this unintelligible apparatus, and the light substance hissed and poured. At first the thing seemed only reasonably large and near to us ; and then I saw how exceedingly little the Selenites upon it seemed, and I realised the full immensity of cavern and machine. I looked from this tremendous affair to the faces of the Selenites with a new respect. I stopped, and Cavor stopped, and stared at this thunderous engine.

"But this is stupendous!" I said. "What can it be for?"

Cavor's blue-lit face was full of an intelligent respect. "I can't dream! Surely these beings—— Men could not make a thing like that! Look at those arms: are they on connecting rods?"

The thick-set Selenite had gone some paces unheeded. He came back and stood between us and the great machine. I avoided seeing him, because I guessed somehow that his idea was to beckon us onward. He walked away in the direction he wished us to go, and turned and came back, and flicked our faces to attract our attention.

Cavor and I looked at each other.

"Cannot we show him we are interested in the machine?" I said.

"Yes," said Cavor. "We'll try that." He turned to our guide, and smiled, and pointed to the machine, and pointed again, and then to his head, and then to the machine. By some defect of reasoning he seemed to imagine that broken English might help these gestures. "Me look 'im," he said ; "me think 'im very much. Yes."

His behaviour seemed to check the Selenites in their desire for our progress for a moment. They faced one another, their queer heads moved, the twittering voices came quick and liquid. Then one of them, a lean, tall creature, with a sort of mantle added to the puttee in which the others were dressed,

twisted his elephant trunk of a hand about Cavor's waist; and pulled him gently to follow our guide, who again went on ahead.

Cavor resisted. "We may just as well begin explaining ourselves now! They may think we are new animals, a new sort of mooncalf, perhaps! It is most important that we should show an intelligent interest from the outset."

He began to shake his head violently. "No, no," he said; "me not come on one minute. Me look at 'im."

"Isn't there some geometrical point you might bring in *à propos* of that affair?" I suggested, as the Selenites conferred again.

"Possibly a parabolic——" he began.

He yelled loudly and leaped six feet or more!

One of the four armed moon-men had pricked him with a goad!

I turned on the goad-bearer behind me with a swift, threatening gesture and he started back. This and Cavor's sudden shout and leap clearly astonished all the Selenites. They receded hastily, facing us. For one of those moments that seem to last for ever we stood in angry protest, with a scattered semi-circle of these inhuman beings about us.

"He pricked me!" said Cavor, with a catching of the voice.

"I saw him," I answered.

"Confound it!" I said to the Selenites; "we're not going to stand that! What on earth do you take us for?"

I glanced quickly right and left. Far away across the blue wilderness of cavern I saw a number of other Selenites running towards us; broad and slender they were and one with a larger head than the others. The cavern spread wide and low, and receded in every direction into darkness. Its roof, I remember, seemed to bulge down as if with the weight of the vast thickness of rocks that prisoned us. There was no way out of it—no way out of it. Above, below, in every direction, was the unknown, and these inhuman creatures with goads and gestures confronting us, and we two unsupported men!

CHAPTER FOURTEEN

THE GIDDY BRIDGE

JUST for a moment that hostile pause endured. I suppose that both we and the Selenites did some very rapid thinking. My clearest impression was that there was nothing to put my back against and that we were bound to be surrounded and killed. The overwhelming folly of our presence there loomed over me in black, enormous reproach. Why had I ever launched myself on this mad, inhuman expedition?

Cavor came to my side and laid his hand on my arm. His pale and terrified face was ghastly in the blue light.

"We can't do anything," he said. "It's a mistake. They don't understand. We must go—as they want us to go."

I looked down at him, and then at the fresh Selenites who were coming to help their fellows. "If I had my hands free——"

"It's no use," he panted.

"No."

"We'll go."

And he turned about and led the way in the direction that had been indicated for us.

I followed, trying to look as subdued as possible, and feeling at the chains about my wrists. My blood was boiling. I noted nothing more of that cavern, though it seemed to take a long time before we had marched across it, or if I noted anything I forgot it as I saw it. My thoughts were concentrated, I think, upon my chains and the Selenites, and particularly upon the helmeted ones with the goads. At first they marched parallel with us, and at a respectful distance, but presently they were overtaken by three others, and then they drew nearer until they were within arm's length again. I winced like a spurred horse as they came near to us. The shorter, thicker Selenite marched at first on our right flank, but presently came in front of us again.

How well the picture of that grouping has bitten into my brain: the back of Cavor's downcast head just in front of me, and the dejected droop of his shoulders, and our guide's gaping visage, perpetually jerking about him, and the goad-bearers on each side, watchful yet open-mouthed—a blue monochrome. And after all, I do remember one other thing besides the purely personal affair, which is that a sort of gutter came presently across the floor of the cavern and then ran along by the side of the path of rock we followed. It was full of that same bright blue luminous stuff that flowed out of the great machine. I walked close beside it, and I can

testify it radiated not a particle of heat. It was brightly shining, and yet it was neither warmer nor colder than anything else in the cavern.

Clang, clang, clang, we passed under the thumping levers of another vast machine, and so came at last to a wide tunnel, in which we could even hear the pad, pad of our shoeless feet, and which, save for the trickling thread of blue to the right of us, was quite unlit. The shadows made gigantic travesties of our shapes and those of the Selenites on the irregular wall and roof of the tunnel. Ever and again crystals in the walls scintillated like gems, ever and again the passage expanded into a stalactitic cavern, or gave off branches that vanished into darkness.

We seemed to be marching down that tunnel for a long time. "Trickle, trickle," went the flowing light very softly, and our footfalls and their echoes made an irregular paddle, paddle. My mind settled down to the question of my chains. If I were to slip off one turn *so*, and then to twist it *so*. . . .

If I tried to do it very gradually, would they see I was slipping my wrist out of the looser turn? If they did, what would they do?

"Bedford," said Cavor, "it goes down. It keeps on going down."

His remark roused me from my sullen preoccupation. "If they wanted to kill us," he said, dropping back to come level with me, "there is no reason why they should not have done it."

"No," I admitted; "that's true."

"They don't understand us," he said; "they think we are merely strange animals, some wild sort of mooncalf birth, perhaps. It will be only when they observe us better that they will begin to think we have minds——"

"When you trace those geometrical problems?" said I.

"It may be that."

We tramped on for a space.

"You see," said Cavor, "these may be Selenites of a lower class."

"The infernal fools," said I, viciously, glancing at their exasperating faces.

"If we endure what they do to us——"

"We've got to endure it," said I.

"There may be others less stupid. This is the mere outer fringe of their world. It must go down and down, cavern, passage, tunnel, down at last to the sea, hundreds of miles below."

His words made me think of the mile or so of rock and tunnel that might be over our heads already. It was like a weight dropping on my shoulders. "Away from the sun and air," I said. "Even a mine half a mile deep is stuffy."

"This is not—anyhow. It's probable—Ventilation! The

air would blow from the dark side of the moon to the sunlit, and all the carbonic acid would well out there and feed those plants. Up this tunnel, for example—there is quite a breeze. And what a world it must be! The earnest we have in that shaft, and those machines——"

"And the goad," I said. "Don't forget the goad!"

He walked a little in front of me for a time.

"Even that goad——" he said.

"Well?"

"I was angry at the time. But—it was perhaps necessary we should get on. They have different skins and probably different nerves. They may not understand our objection—just as a being from Mars might not like our earthly habit of nudging."

"They'd better be careful how they nudge me."

"And about that geometry. After all, their way is a way of understanding too. They begin with the elements of life and not of thought. Food. Compulsion. Pain. They strike at fundamentals."

"There's no doubt about that," I said.

He went on to talk of the enormous and wonderful world into which we were being taken. I realised slowly from his tone that even now he was not absolutely in despair at the prospect of going ever deeper into this inhuman planet burrow. His mind ran on machines and invention to the exclusion of a thousand dark things that beset me. It wasn't that he intended to make any use of these things: he simply wanted to know them.

"After all," he said, "this is a tremendous occasion. It is the meeting of two worlds. What are we going to see? Think of what is below us here."

"We shan't see much if the light isn't better," I remarked.

"This is only the outer crust. Down below—— On this scale—— There will be everything. Do you notice how different they seem one from another? The story we shall take back!"

"Some rare sort of animal," I said, "might comfort himself in that way while they were bringing him to the Zoo. . . . It doesn't follow that we are going to be shown all these things."

"When they find we have reasonable minds," said Cavor, "they will want to learn about the earth. Even if they have no generous emotions they will teach in order to learn. . . . And the things they must know! The unanticipated things!"

He went on to speculate on the possibility of their knowing things he had never hoped to learn on earth, speculating in that way, with a raw wound from that goad already in his skin! Much that he said I forgot, for my attention was drawn to the fact that the tunnel along which we had been marching was opening out wider and wider. We seemed

from the feeling of the air to be going out into a huge space. But how big the space might really be we could not tell, because it was unlit. Our little stream of light ran in a dwindling thread and vanished far ahead. Presently the rocky walls had disappeared altogether on either hand. There was nothing to be seen but the path in front of us and the trickling, hurrying rivulet of blue phosphorescence. The figures of Cavor and the guiding Selenite marched before me; the sides of their legs and heads that were towards the rivulet were clear and bright blue; their darkened sides, now that the reflection of the tunnel wall no longer lit them, merged indistinguishably in the darkness beyond.

And soon I perceived that we were approaching a declivity of some sort, because the little blue stream dipped suddenly out of sight.

In another moment, as it seemed, we had reached the edge. The shining stream gave one meander of hesitation and then rushed over. It fell to a depth at which the sound of its descent was absolutely lost to us. Far below was a bluish glow, a sort of blue mist. And the darkness the stream dropped out of became utterly void and black, save that a thing like a plank projected from the edge of the cliff and stretched out and faded and vanished altogether. There was a warm air blowing up out of the gulf.

For a moment Cavor and I stood as near the edge as we dared, peering into a blue-tinged profundity. And then our guide was pulling at my arm.

He left me and walked to the end of that plank and stepped upon it, looking back. When he perceived we watched him, he turned about and went on over it, walking as surely as though he was on firm earth. For a moment his form was distinct, then he became a blue blur, and vanished into the obscurity. I was aware of some vague shape looming darkly out of the black.

There was a pause. "Surely——!" said Cavor.

One of the other Selenites walked a few paces out upon the plank and turned and looked back at us unconcernedly. The others stood ready to follow us. Our guide's expectant figure reappeared. He was returning to see why we had not advanced.

"What is that beyond there?" I asked.

"I can't see."

"We can't cross this at any price," said I.

"I could not go three steps on it," said Cavor, "even with my hands free."

We looked at each other's drawn faces in blank consternation.

"They can't know what it is to be giddy," said Cavor.

"It's quite impossible for us to walk that plank."

"I don't believe they see as we do. I've been watching

them. I wonder if they know this is simply blackness for us. How can we make them understand ? "

" Anyhow, we must make them understand."

I think we said these things with a vague half-hope the Selenites might somehow understand. I knew quite clearly that all that was needed was an explanation. Then, as I saw their faces, I realised that an explanation was impossible. Just here it was that our resemblances were not going to bridge our differences. Well, I wasn't going to walk the plank anyhow. I slipped one wrist very quickly out of the coil of chain that was loose, and then began to twist both in opposite directions. I was standing nearest to the bridge, and as I did this two of the Selenites laid hold of me and pulled me gently towards it.

I shook my head violently. " No go," I said, " no use. You don't understand."

Another Selenite added his compulsion. I was forced to step forward.

" I've got an idea," said Cavor, but I knew his ideas.

" Look here ! " I exclaimed to the Selenites. " Steady on ! It's all very well for you——"

I swung round upon my heel ; I burst out into curses. For one of the armed Selenites had stabbed me behind with his goad.

I wrenched my wrist free from the little tentacles that held them. I turned on the goad-bearer. " Confound you ! " I cried. " I've warned you of that. What on earth do you think I'm made of, to stick that into me ? If you touch me again—— ! "

By way of answer he pricked me forthwith.

I heard Cavor's voice in alarm and entreaty. Even then I think he wanted to compromise with these creatures. " I say, Bedford," he cried, " I know a way ! " But the sting of that second stab seemed to set free some pent-up reserve of energy in my being. Instantly a link of the wrist chain snapped, and with it snapped all considerations that had held us unresisting in the hands of these moon-creatures. For that second, at least, I was mad with fear and anger. I took no thought of consequences. I hit straight out at the face of the thing with the goad. The chain was twisted round my fist. . . .

There came another of those beastly surprises of which the moon world is full.

My mailed hand seemed to go clean through him. He smashed like some sort of sweetmeat with liquid in it. He broke right in. He squelched and splashed. It was like hitting a damp toadstool. The flimsy body went spinning a dozen yards and fell with a flabby impact. I was astonished. I was incredulous that any living thing could be so flimsy. For an instant I could have believed the whole thing a dream.

Then it had become real and imminent again. Neither Cavor nor the other Selenites seemed to have done anything from the time when I had turned about to the time when the dead Selenite hit the ground. Every one stood back from us two, every one alert. That arrest seemed to last at least a second after the Selenite was down. Every one must have been taking the thing in. I seem to remember myself standing with my arm half retracted, trying also to take it in. "What next?" clamoured my brain; "what next?" Then in a moment every one was moving!

I perceived we must get our chains loose, and that before we could do this these Selenites had to be beaten off. I faced towards the group of the three goad-bearers. Instantly one threw his goad at me. It swished over my head, and I suppose went flying into the abyss behind.

I leaped right at him with all my might as the goad flew over me. He turned to run as I jumped, and I bore him to the ground, came down right upon him, and slipped upon his smashed body and fell. He seemed to wriggle under my feet.

I came into a sitting position, and on every hand the blue backs of the Selenites were receding into the darkness. I bent a link by main force and untwisted the chain that had hampered me about the ankles, and sprang to my feet, with the chain in my hand. Another goad, flung javelin-wise, whistled by me, and I made a rush towards the darkness out of which it had come. Then I turned back towards Cavor, who was still standing in the light of the rivulet near the gulf, convulsively busy with his wrists, and at the same time jabbering nonsense about his idea.

"Come on!" I cried.

"My hands!" he answered.

Then, realising that I dared not run back to him because my ill-calculated steps might carry me over the edge, he came shuffling towards me, with his hands held out before him.

I gripped his chains at once to unfasten them.

"Where are they?" he panted.

"Run away. They'll come back. They're throwing things! Which way shall we go?"

"By the light. To that tunnel. Eh?"

"Yes," said I, and his hands were free.

I dropped on my knees and fell to work on his ankle bonds. Whack came something—I know not what—and splashed the livid streamlet into drops about us. Far away on our right a piping and whistling began.

I whipped the chain off his feet, and put it in his hand. "Hit with that!" I said, and without waiting for an answer set off in big bounds along the path by which we had come. I had a nasty feeling that these things could jump out of the darkness on to my back. I heard the impact of Cavor's leaps come following after me.

We ran in vast strides. But that running, you must understand, was an altogether different thing from any running on earth. On earth one leaps and almost instantly hits the ground again; but on the moon, because of its weaker pull, one shot through the air for several seconds before one came to earth. In spite of our violent hurry this gave an effect of long pauses, pauses in which one might have counted seven or eight. Step, and one soared off. All sorts of questions ran through my mind: "Where are the Selenites? What will they do? Shall we ever get to that tunnel? Is Cavor far behind? Are they likely to cut him off?" Then whack, stride, and off again for another step.

I saw a Selenite running in front of me, his legs going exactly as a man's would go on earth, saw him glance over his shoulder, and heard him shriek as he ran aside out of my way into the darkness. He was, I think, our guide, but I am not sure. Then in another vast stride the walls of rock had come into view on either hand, and in two more strides I was in the tunnel, and tempering my pace to its low roof. I went on to a bend, then stopped and turned back, and plug, plug, plug, Cavor came in view, splashing into the stream of blue light at every stride, and grew larger and blundered into me. We stood clutching each other. For a moment, at least, we had shaken off our captors and were alone.

We were both very much out of breath. We spoke in panting, broken sentences.

"You spoiled it all!" panted Cavor.

"Nonsense," I cried. "It was that or death."

"What are we to do?"

"Hide."

"How can we?"

"It's dark enough."

"But where?"

"Up one of these side caverns."

"And then?"

"Think."

"Right—come on."

We strode on, and presently came to a radiating, dark cavern. Cavor was in front. He hesitated, and chose a black mouth that seemed to promise good hiding. He went towards it and turned.

"It's dark," he said.

"Your legs and feet will light us. You're wet with that luminous stuff."

"But——"

A tumult of sounds, and in particular a sound like a clanging gong became audible advancing up the main tunnel. It was horribly suggestive of a tumultuous pursuit. We made a bolt for the unlit cavern forthwith. As we ran our way was lit by the irradiation of Cavor's legs. "It's lucky," I panted,

"they took off our boots, or we should fill this place with clatter." On we rushed, taking the smallest steps we could to avoid striking the roof of the cavern. After a time we seemed to be gaining on the uproar. It became muffled, it dwindled, it died away.

I stopped and looked back, and I heard the pad, pad of Cavor's feet receding. Then he stopped also. "Bedford," he whispered, "there's a sort of light in front of us."

I looked, and at first could see nothing. Then I perceived his head and shoulders dimly outlined against a fainter darkness. I saw also that this mitigation of the darkness was not blue as all the other light within the moon had been, but a pallid grey, a very vague faint white, the daylight colour. Cavor noted this difference as soon or sooner than I did, and I think, too, that it filled him with much the same wild hope.

"Bedford," he whispered, and his voice trembled, "that light—it is possible——"

He did not dare to say the thing he hoped. There came a pause. Suddenly I knew by the sound of his feet that he was striding towards that pallor. I followed him with a beating heart.

CHAPTER FIFTEEN

POINTS OF VIEW

THE light grew stronger as we advanced. In a little time it was nearly as strong as the phosphorescence on Cavor's legs. Our tunnel was expanding into a cavern and this new light was at the farther end of it. I perceived something that set my hopes leaping and bounding.

"Cavor," I said, "it comes from above! I am certain it comes from above!"

He made no answer, but hurried on.

Indisputably it was a grey light, a silvery light.

In another moment we were beneath it. It filtered down through a chink in the walls of the cavern, and as I stared up, drip, came a huge drop of water upon my face. I started, and stood aside; drip, fell another drop quite audibly on the rocky floor.

"Cavor," I said, "if one of us lifts the other, he can reach that crack!"

"I'll lift you," he said, and incontinently hoisted me as though I were a baby.

I thrust an arm into the crack, and just at my finger-tips found a little ledge by which I could hold. The white light was very much brighter now. I pulled myself up by two fingers with scarcely an effort, though on earth I weigh twelve stone, reached to a still higher corner of rock, and so got my feet on the narrow ledge. I stood up and searched up the rocks with my fingers; the cleft broadened out upwardly. "It's climbable," I said to Cavor. "Can you jump up to my hand if I hold it down to you?"

I wedged myself between the sides of the cleft, rested knee and foot on the ledge, and extended a hand. I could not see Cavor, but I could hear the rustle of his movements as he crouched to spring. Then whack, and he was hanging to my arm—and no heavier than a kitten! I lugged him up until he had a hand on my ledge and could release me.

"Confound it!" I said, "any one could be a mountaineer on the moon," and so set myself in earnest to climbing. For a few minutes I clambered steadily, and then I looked up again. The cleft opened out gradually, and the light was brighter. Only——

It was not daylight after all!

In another moment I could see what it was, and at the sight I could have beaten my head against the rocks with disappointment. For I beheld simply an irregularly sloping open space, and all over its slanting floor stood a forest of little club-shaped fungi, each shining gloriously with that pinkish, silvery light. For a moment I stared at their soft radiance, then sprang

forward and upward among them. I plucked up half a dozen and flung them against the rocks, and then sat down, laughing bitterly, as Cavor's ruddy face came into view.

"It's phosphorescence again," I said. "No need to hurry. Sit down and make yourself at home." And as he spluttered over our disappointment I began to fling more of these growths into the cleft.

"I thought it was daylight," he said.

"Daylight!" cried I. "Daybreak, sunset, clouds, and windy skies! Shall we ever see such things again?"

As I spoke a little picture of our world seemed to rise before me, bright and dainty and clear, like the background of some old Italian picture. "The sky that changes, and the sea that changes, and the hills and the green trees, and the towns and cities shining in the sun. Think of a wet roof at sunset, Cavor! Think of the windows of a westward house!"

He made no answer.

"Here we are burrowing in this beastly world that isn't a world, with its inky ocean hidden in some abominable blackness below, and outside that torrid day and that death stillness of night. And all those things that are chasing us now, beastly men of leather—insect men, that come out of a nightmare! After all, they're right! What business have we here, smashing them and disturbing their world? For all we know the whole planet is up and after us already. In a minute we may hear them whimpering and their gongs going. What are we to do? Where are we to go? Here we are as comfortable as snakes from Jamrach's loose in a Surbiton villa!"

"It was your fault," said Cavor.

"My fault!" I shouted. "Good Lord!"

"I had an idea."

"Curse your ideas!"

"If we had refused to budge——"

"Under those goads?"

"Yes. They would have carried us."

"Over that bridge?"

"Yes. They must have carried us from outside."

"I'd rather be carried by a fly across a ceiling. Good Heavens!"

I resumed my destruction of the fungi. Then suddenly I saw something that struck me even then.

"Cavor," I said, "these chains are of gold!"

He was thinking intently, with his hands gripping his cheeks. He turned his head slowly and stared at me and, when I had repeated my words, at the twisted chain about his right hand. "So they are," he said, "so they are." His face lost its transitory interest even as he looked. He hesitated for a moment, then went on with his interrupted meditation. I sat for a space puzzling over the fact that I had only just observed this, until I considered the blue light in which we had been and

which had taken all the colour out of the metal. And from that discovery I started upon a train of thought that carried me wide and far. I forgot that I had just been asking what business we had in the moon. Gold. . . .

It was Cavor who spoke first. "It seems to me that there are two courses open to us."

"Well?"

"Either we can attempt to make our way—fight our way if necessary—out to the exterior and then hunt for our sphere until either we find it or the cold of the night comes to kill us, or else——"

He paused. "Yes," I said, though I knew what was coming.

"We might attempt once more to establish some sort of understanding with the minds of the people in the moon."

"So far as I'm concerned—it's the first."

"I doubt."

"I don't."

"You see," said Cavor, "I do not think we can judge the Selenites by what we have seen of them. Their central world, their civilised world, will be far below in the profounder caverns about their sea. This region of the crust in which we are is an outlying district, a pastoral region. At least, that is my interpretation. These Selenites we have seen may be only the equivalent of cowboys and engine-tenders. Their use of goads—in all probability mooncalf goads—the lack of imagination they show in expecting us to be able to do just what they can do, their indisputable brutality, all seem to point to something of that sort. But if we endured——"

"Neither of us could endure a six-inch plank across the bottomless pit for very long."

"No," said Cavor, "but then——"

"I *won't*," I said.

He discovered a new line of possibilities. "Well, suppose we got ourselves into some corner, where we could defend ourselves against these hinds and labourers. If, for example, we could hold out for a week or so, it is probable that the news of our appearance would filter down to the more intelligent and populous parts——"

"If they exist."

"They must exist, or whence come those tremendous machines?"

"That's possible, but it's the worst of the two chances."

"We might write up inscriptions on walls——"

"How do we know their eyes could see the marks we made?"

"If we cut them——"

"That's possible of course."

I took up a new thread of thought. "After all," I said, "I suppose you don't think these Selenites so infinitely wiser than men?"

"They must know a lot more—or at least a lot of different things."

"Yes. but——" I hesitated. "I think you'll admit, Cavor, that you're rather an exceptional man."

"How?"

"Well, you—you're a rather lonely man; have been, that is. You haven't married."

"Never wanted to. But why?"

"And you never grew richer than you happened to be?"

"Never wanted that either."

"You've just rooted after knowledge."

"Well, a certain curiosity is natural——"

"You think so. That's just it. You think every other mind wants to know. I remember once, when I asked you why you conducted all these researches, you said you wanted your F.R.S., and to have the stuff called Cavorite, and things like that. You know perfectly well you didn't do it for that; but at the time my question took you by surprise, and you felt you ought to have something to look like a motive. Really, you conducted researches because you had to. It's your twist."

"Perhaps it is——"

"It isn't one man in a million has that twist. Most men want—well, various things, but very few want knowledge for its own sake. I don't, I know perfectly well. Now these Selenites seem to be a driving, busy sort of people, but how do you know that even the most intelligent will take an interest in us or our world? I don't believe they'll even know we have a world. They never come out at night—they'd freeze if they did. They've probably never seen any heavenly body at all except blazing sun. How are they to know there is another world? What does it matter to them if they do? Well, even if they have had a glimpse of a few stars or even of the earth crescent, what of that? Why should people living inside a planet trouble to observe that sort of thing? Men wouldn't have done it except for the seasons and sailing; why should the moon people? . . .

"Well, suppose there are a few philosophers like yourself. They are just the very Selenites who'll never hear of our existence. Suppose a Selenite had dropped on the earth when you were at Lympne; you'd have been the last man in the world to hear he had come. You never read a newspaper. You see the chances against you. Well, it's for these chances we're sitting here doing nothing while precious time is flying. I tell you we've got into a fix. We've come unarmed, we've lost our sphere, we've got no food, we've shown ourselves to the Selenites and made them think we're strange, strong, dangerous animals, and unless these Selenites are perfect fools they'll set about now and hunt us till they find us, and when they find us they'll take us if they can and kill us if

they can't, and that's the end of the matter. After they take us they'll probably kill us through some misunderstanding. After we're done for they may discuss us, perhaps, but we shan't get much fun out of that."

"Go on."

"On the other hand, here's gold knocking about like cast-iron at home. If only we can get some of it back, if only we can find our sphere again before they do and get back, then——"

"Yes?"

"We might put the thing on a sounder footing. Come back in a bigger sphere with guns."

"Good Lord!" cried Cavor, as though the idea was horrible.

I shied another luminous fungus down the cleft.

"Look here, Cavor," I said, "I've half the voting power anyhow in this affair, and this is a case for a practical man. I'm a practical man, and you are not. I'm not going to trust to Selenites and geometrical diagrams again if I can help it. . . . That's all. Get back. Drop all this secrecy—or most of it. And come again."

He reflected. "When I came to the moon," he said, "I ought to have come alone."

"The question before the meeting," I said, "is how to get back to the sphere."

For a time we nursed our knees in silence. Then he seemed to decide to accept my reasons.

"I think," he said, "one can get data. It is clear that, while the sun is on this side of the moon, the air will be blowing through this planet sponge from the dark side hither. On this side, at any rate, the air will be expanding and flowing out of the moon caverns into the crater. . . . Very well, there's a draught here."

"So there is."

"And that means that this is not a dead end, somewhere behind us this cleft goes on and up. The draught is blowing up, and that is the way we have to go. If we try to get up any sort of chimney or gully there is, we shall not only get out of these passages where they are hunting for us——"

"But suppose the gully is too narrow?"

"We'll come down again."

"Ssh!" I said, suddenly; "what's that?"

We listened. At first it was an indistinct murmur, and then one picked out the clang of a gong. "They must think we are mooncalves," said I, "to be frightened at that."

"They're coming along that passage," said Cavor. "They must be."

"They'll not think of the cleft. They'll go past."

I listened again for a space. "This time," I whispered, "they're likely to have some sort of weapon."

Then suddenly I sprang to my feet. "Good heavens,

Cavor!" I cried. "But they *will*. They'll see the fungi I have been pitching down. They'll——"

I didn't finish my sentence. I turned about and made a leap over the fungus-tops towards the upper end of the cavity. I saw that the space turned upwards and became a draughty cleft again, ascending to impenetrable darkness. I was about to clamber up into this, and then with a happy inspiration turned back.

"What are you doing?" asked Cavor.

"Go on!" said I, and went back and got two of the shining fungi, and putting one into the breast pocket of my flannel jacket so that it stuck out to light our climbing, went back with the other for Cavor. The noise of the Selenites was now so loud that it seemed they must be already beneath the cleft. But it might be they would have difficulty in clambering into it, or might hesitate to ascend it against our possible resistance. At any rate we had now the comforting knowledge of the enormous muscular superiority that was the gift of our birth on another planet. The next moment I was clambering with gigantic vigour after Cavor's blue-lit heels.

CHAPTER SIXTEEN

THE FIGHT IN THE CAVE OF THE MOON BUTCHERS

I DO not know how far we clambered before we came to the grating. It may be we ascended only a few hundred feet, but at the time it seemed to me we might have hauled and jammed and hopped and wedged ourselves through a mile or more of vertical ascent. Whenever I recall that time there comes into my head the heavy clank of our golden chains that followed every movement. Very soon my knuckles and knees were raw, and I had a bruise on one cheek. After a time the first violence of our efforts diminished, and our movements became more deliberate and less painful.

The noise of the pursuing Selenites had died away altogether. It seemed almost as if they had not traced us up the crack after all, in spite of the tell-tale heap of broken fungi that must have lain beneath it. At times the cleft narrowed so much that we could scarce squeeze into it, at others it expanded into great drusy cavities studded with prickly crystals, or thickly beset with dull, shining fungoid pimples. Sometimes it twisted spirally, and at other times slanted down nearly to the horizontal direction. Ever and again there was the intermittent drip and trickle of water by us. Once or twice it seemed to us that small living things had rustled out of our reach, but what they were we never saw. They may have been venomous beasts for all I know, but they did us no harm, and we were now tuned to a pitch when a weird creeping thing more or less mattered little. And at last, far above came the familiar bluish light again, and then we saw that it filtered through a grating that barred our way.

We whispered as we pointed this out to each other and became more and more cautious in our ascent. Presently we were close under the grating, and by pressing my face against its bars I could see a limited portion of the cavern beyond. It was clearly a large space, and lit no doubt by some rivulet of the same blue light that we had seen flow from the beating machinery. An intermittent trickle of water dropped ever and again between the bars near my face.

My first endeavour was naturally to see what might be upon the floor of the cavern, but our grating lay in a depression whose rim hid all this from our eyes. Our foiled attention then fell back upon the suggestion of the various sounds we heard, and presently my eye caught a number of faint shadows that played across the dim roof, far overhead.

Indisputably there were several Selenites, perhaps a considerable number in this space, for we could hear the noises of their intercourse and faint sounds that I identified as their footfalls. There was also a succession of regularly repeated

sounds, chid, chid, chid, which began and ceased, suggestive of a knife or spade hacking at some soft substance. Then came a clank as of chains, a whistle and a rumble as of a truck running over a hollowed place, and then again that chid, chid, chid, resumed. The shadows told of shapes that moved quickly and rhythmically in agreement with that regular sound, and rested when it ceased.

We put our heads close together and began to discuss these things in noiseless whispers.

"They are occupied," I said; "they are occupied in some way."

"Yes."

"They're not seeking us or thinking of us."

"Perhaps they have not heard of us."

"Those others are hunting about below. If suddenly we appeared here——"

We looked at each other.

"There might be a chance to parley," said Cavor.

"No," I said, "not as we are."

For a space we remained, each occupied with his own thoughts.

Chid, chid, chid went the chipping, and the shadows moved to and fro.

I looked at the grating. "It's flimsy," I said. "We might bend two of the bars and crawl through."

We wasted a little time in vague discussion. Then I took one of the bars in both hands, and got my feet up against the rock until they were almost on a level with my head, and so thrust against the bar. It bent so suddenly that I almost slipped. I clambered about and bent the adjacent bar in the opposite direction, and then took the luminous fungus from my pocket and dropped it down the fissure.

"Don't do anything hastily," whispered Cavor, as I twisted myself up through the opening I had enlarged. I had a glimpse of busy figures as I came through the grating, and immediately bent down, so that the rim of the depression in which the grating lay hid me from their eyes, and so lay flat, signalling advice to Cavor as he also prepared to come through. Presently we were side by side in the depression, peering over the edge at the cavern and its occupants.

It was a much larger cavern than we had supposed from our first glimpse of it, and we looked up from the lowest portion of its sloping floor. It widened out as it receded from us, and its roof came down and hid the remoter portion altogether. Lying in a line along its length, vanishing at last far away in that tremendous perspective, were a number of huge shapes, huge pallid hulls, upon which the Selenites were busy. At first they seemed big white cylinders of vague import. Then I noted the heads upon them lying towards us, eyeless and skinless like the heads of sheep at a butcher's,

and perceived they were the carcasses of mooncalves being cut up, much as the crew of a whaler might cut up a moored whale. They were cutting off the flesh in strips, and on some of the farther trunks the white ribs were showing. It was the sound of their hatchets that made that chid, chid, chid. Some distance away a thing like a trolley, cable-drawn and loaded with chunks of lax meat, was running up the slope of the cavern floor. That enormous busy avenue of hulls that were destined to be food gave us a sense of the vast populousness of the moon world second only to the effect of our first glimpse down the shaft.

It seemed to me at first that the Selenites must be standing on trestle-supported planks,[1] and then I saw that the planks and supports and the hatchets were really of the same leaden hue as my fetters had seemed before white light came to bear on them. A number of very thick-looking crowbars lay about the floor and had apparently assisted to turn the dead mooncalf over on its side. They were perhaps six feet long, with shaped handles : very tempting looking weapons. The whole place was lit by three transverse streams of the blue fluid.

We lay for a long time noting all these things in silence. "Well ?" said Cavor at last.

I crouched lower and turned to him. I had come upon a brilliant idea. "Unless they lowered those bodies by a crane," I said, "we must be nearer the surface than I thought."

"Why ?"

"The mooncalf doesn't hop and it hasn't got wings."

He peered over the edge of the hollow again. "I wonder, now——" he began. "After all we have never gone far from the surface."

I stopped him by a grip on his arm. I had heard a noise from the cleft below us !

We twisted ourselves about and lay as still as death, with every sense alert. In a little while I did not doubt that something was quietly ascending the cleft. Very slowly and quite noiselessly I assured myself of a good grip on my chain, and waited for that something to appear.

"Just look at those chaps with the hatchets again," I said.

"They're all right," said Cavor.

I took a quick provisional aim at the gap in the grating. I could hear now quite distinctly the soft twittering of the ascending Selenites, the dab of their hands against the rock, and the falling of dust from their grips as they clambered.

Then I could see that there was something moving dimly in the blackness below the grating, but what it might be I could not distinguish. The whole thing seemed to hang fire just for

[1] I do not remember seeing any wooden things on the moon : doors, tables, everything corresponding to our terrestrial joinery was made of metal, and I believe for the most part of gold, which as a metal would, of course, naturally recommend itself—other things being equal—on account of the ease in working it and its toughness and durability.

a moment ; then, smash ! I had sprung to my feet, struck savagely at something that had flashed out at me. It was the keen point of a spear. I have thought since that its length in the narrowness of the cleft must have prevented its being sloped to reach me. Anyhow, it shot out from the grating like the tongue of a snake and missed, and flew back and flashed again. But the second time I snatched and caught it, and wrenched it away, but not before another had darted ineffectually at me.

I shouted with triumph as I felt the hold of the Selenite resist my pull for a moment and give, and then I was jabbing down through the bars, amidst squeals from the darkness, and Cavor had snapped off the other spear, and was leaping and flourishing it beside me and making inefficient jabs. "Clang, clang," came up through the grating, and then an axe hurtled through the air and whacked against the rocks beyond to remind me of the fleshers at the carcasses up the cavern.

I turned, and they were all coming towards us in open order, waving their axes. They were short thick little beggars with long arms, strikingly different from the ones we had seen before. If they had not heard of us before they must have realised the situation with incredible swiftness. I stared at them for a moment, spear in hand. "Guard the grating, Cavor," I cried, and howling to intimidate them, I rushed to meet them. Two of them missed with their hatchets, and the rest fled incontinently. Then the two also were sprinting away up the cavern, with hands clenched and heads down. I never saw men run like them.

I knew the spear I had was useless for me. It was thin and flimsy, only effectual for a thrust, and too long for a quick recover. So I only chased the Selenites as far as the first carcass, and stopped there and picked up one of the crowbars that were lying about. It felt comfortably heavy and equal to smashing any number of Selenites. I threw away my spear, and picked up a second crowbar for the other hand. I felt five times better than I had with the spear. I shook the two threateningly at the Selenites, who had come to a halt in a little crowd far away up the cavern, and then turned about to look at Cavor.

He was leaping from side to side of the grating making threatening jabs with his broken spear. That was all right. It would keep the Selenites down—for a time at least. I looked up the cavern again. What on earth were we going to do now ?

We were cornered already. But these butchers up the cavern had been surprised ; they were probably scared, and they had no special weapons, only those little hatchets of theirs. And that way lay escape. Their sturdy little forms—ever so much shorter and thicker than the mooncalf herders—

were scattered up the slope in a way that was eloquent of indecision. I had the moral advantage of a mad bull in a street. But for all that there seemed a tremendous crowd of them. Very probably there was. Those Selenites down the cleft had certainly some infernally long spears. It might be they had other surprises for us. . . . But, confound it! if we charged up the cave we should let them up behind us; and if we didn't, those little brutes up the cave would probably be reinforced. Heaven alone knew what tremendous engines of warfare—guns, bombs, terrestrial torpedoes—this unknown world below our feet, this vaster world of which we had only picked the outer cuticle, might not presently send up to our destruction. It became clear the only thing to do was to charge! It became clearer as the legs of a number of fresh Selenites appeared running down the cavern towards us.

"Bedford!" cried Cavor, and behold! he was half-way between me and the grating.

"Go back!" I cried. "What are you doing——?"

"They've got—it's like a gun!"

And struggling in the grating between those defensive spears appeared the head and shoulders of a singularly lean and angular Selenite bearing some complicated apparatus.

I realised Cavor's utter incapacity for the fight we had in hand. For a moment I hesitated. Then I rushed past him whirling my crowbars, and shouting to confound the aim of the Selenite. He was aiming in the queerest way with the thing against his stomach. "*Chuzz!*" The thing wasn't a gun; it went off more like a cross-bow, and dropped me in the middle of a leap.

I didn't fall down—I simply came down a little shorter than I should have done if I hadn't been hit, and from the feel of my shoulder the thing might have tapped me and glanced off. Then my left hand hit against the shaft, and I perceived there was a sort of spear sticking half through my shoulder. The moment after, I got home with the crowbar in my right hand, and hit the Selenite fair and square. He collapsed—crushed and crumpled—his head smashed like an egg.

I dropped a crowbar, pulled the spear out of my shoulder, and began to jab it down the grating into the darkness. At each jab came a shriek and twitter. Finally I hurled the spear down upon them with all my strength, leaped up, picked up the crowbar again, and started for the multitude up the cavern.

"Bedford!" cried Cavor, "Bedford!" as I flew past him.

I seem to remember his footsteps coming on behind me.

Step, leap . . . whack, step, leap. . . . Each leap seemed to last ages. With each, the cave opened out and the number of visible Selenites increased. At first they seemed all running about like ants in a disturbed ant-hill, one or two waving hatchets and coming to meet me, more running away, some

bolting sidewise into the avenue of carcasses; then presently others came in sight carrying spears, and then others. I saw a most extraordinary thing, all hands and feet, bolting for cover. The cavern grew darker farther up. Flick! something flew over my head. Flick! As I soared in mid-stride I saw a spear hit and quiver in one of the carcasses to my left. Then as I came down one hit the ground before me and I heard the remote chuzz! with which their things were fired. Flick! Flick! for a moment it was a shower. They were volleying!

I stopped dead.

I don't think I thought clearly then. I seem to remember a stereotyped phrase running through my mind: "Zone of fire, seek cover!" I know I made a dash for the space between two of the carcasses, and stood there, panting and feeling very wicked.

I looked round for Cavor, and for a moment it seemed as if he had vanished from the world. Then he came out of the darkness between the row of the carcasses and the rocky wall of the cavern. I saw his little face, dark and blue, and shining with perspiration and emotion.

He was saying something, but what it was I did not heed. I had realised that we might work from mooncalf to mooncalf up the cave until we were near enough to charge home. It was charge or nothing. "Come on!" I said, and led the way.

"Bedford!" he cried, unavailingly.

My mind was busy as we went up that narrow alley between the dead bodies and the wall of the cavern. The rocks curved about—they could not enfilade us. Though in that narrow space we could not leap, yet with our earth-born strength we were still able to go very much faster than the Selenites. I reckoned we should presently come among them. Once we were on them they would be hardly as formidable as black-beetles. Only there would first of all be a volley. I thought of a stratagem. I whipped off my flannel jacket as I ran.

"Bedford!" panted Cavor, behind me.

I glanced back. "What?" said I.

He was pointing upward over the carcasses. "White light!" he said. "White light again!"

I looked, and it was even so: a faint white ghost of twilight in the remoter cavern roof. That seemed to give me double strength.

"Keep close," I said. A flat long Selenite dashed out of the darkness and squealed and fled. I halted and stopped Cavor with my hand. I hung my jacket over my crowbar, ducked round the next carcass, dropped jacket and crowbar, showed myself, and darted back.

"Chuzz—flick," just one arrow came. We were close on the Selenites, and they were standing in a crowd, broad, short

and tall together, with a little battery of their shooting implements pointing down the cave. Three or four other arrows followed the first, and then their fire ceased.

I stuck out my head, and escaped by a hair's breadth. This time I drew a dozen shots or more, and heard the Selenites shouting and twittering as if with excitement as they shot. I picked up jacket and crowbar again.

"Now!" said I, and thrust out the jacket.

"Chuzz-zz-zz-zz! Chuzz!" In an instant my jacket had grown a thick beard of arrows, and they were quivering all over the carcass behind us. Instantly I slipped the crowbar out of the jacket, dropped the jacket—for all I know to the contrary it is lying up there in the moon now—and rushed out upon them.

For a minute perhaps it was massacre. I was too fierce to discriminate, and the Selenites were probably too scared to fight. At any rate they made no sort of fight against me. I saw scarlet, as the saying is. I remember I seemed to be wading among these leathery thin things as a man wades through tall grass, mowing and hitting, first right then left—smash, smash! Little drops of moisture flew about. I trod on things that crushed and piped and went slippery. The crowd seemed to open and close and flow like water. They seemed to have no combined plan whatever. There were spears flying about me; I was grazed over the ear by one. I was stabbed once in the arm and once in the cheek, but I only found that out afterwards when the blood had had time to run and cool and feel wet.

What Cavor did I do not know. For a space it seemed that this fighting had lasted for an age and must needs go on for ever. Then suddenly it was all over, and there was nothing to be seen but the backs of heads bobbing up and down as their owners ran in all directions. . . . I seemed altogether unhurt. I ran forward some paces, shouting, then turned about. I was amazed.

I had come through them in vast flying strides. They were all behind me, and running hither and thither to hide.

I felt an enormous astonishment at the evaporation of the great fight into which I had hurled myself, and not a little exultation. It did not seem to me that the Selenites were unexpectedly flimsy, but that I was unexpectedly strong. I laughed stupidly. This fantastic moon!

I glanced for a moment at the smashed and writhing bodies that were scattered over the cavern floor with a vague idea of further violence, then hurried on after Cavor.

CHAPTER SEVENTEEN

IN THE SUNLIGHT

PRESENTLY we saw that the cavern before us opened on a hazy void. In another moment we had emerged upon a slanting gallery that projected into a vast circular space, a huge cylindrical pit running vertically up and down. Round this pit the slanting gallery ran without any parapet or protection for a turn and a half, and then plunged high above into the rock again. Somehow it reminded me then of one of those spiral turns of the railway through the Saint Gothard. It was all tremendously huge. I can scarcely hope to convey to you the Titanic proportion of all that place—the Titanic effect of it. Our eyes followed up the vast declivity of the pit wall, and overhead and far above we beheld a round opening set with faint stars, and half of the lip about it well-nigh blinding with the white light of the sun. At that we cried aloud simultaneously.

"Come on!" I said, leading the way.

"But there?" said Cavor, and very carefully stepped nearer the edge of the gallery. I followed his example, craned forward and looked down, but I was dazzled by that gleam of light above, and I could see only a bottomless darkness with spectral patches of crimson and purple floating therein. Yet if I could not see I could hear. Out of this darkness came a sound—a sound like the angry hum one can hear outside a hive of bees, a sound out of that enormous hollow, it may be, for miles beneath our feet. . . .

For a moment I listened, then tightened my grip on my crowbar and led the way up the gallery.

"This must be the shaft we looked down upon," said Cavor. "Under that lid."

"And below there is where we saw the lights."

"The lights!" said he. "Yes—the lights of the world that now we shall never see."

"We'll come back," I said, for now we had escaped so much I was rashly sanguine that we should recover the sphere.

His answer I did not catch.

"Eh?" I asked.

"It doesn't matter," he answered, and we hurried on in silence.

I suppose that slanting lateral way was four or five miles long, allowing for its curvature, and it ascended at a slope that would have made it almost impossibly steep on earth, but which we strode up easily. We saw only two Selenites during all that portion of our flight, and as soon as they became aware of us they ran headlong. It was clear that the

knowledge of our strength and violence had reached them. Our way to the exterior was unexpectedly plain. The spiral gallery straightened into a steeply ascendant tunnel, its floor bearing abundant traces of the mooncalves, and so straight and short in proportion to its vast arch that no part of it was absolutely dark. Almost immediately it began to lighten, and then far off and high up, and quite blindly brilliant, appeared its opening on the exterior, a slope of Alpine steepness surmounted by a crest of bayonet shrub, tall but broken down now and dry and dead, in spiky silhouette against the sun.

And it is strange that we men, to whom this very vegetation had seemed so weird and horrible a little time ago, should now behold it with the emotion a home-coming exile might feel at sight of his native land. We welcomed even the rareness of the air that made us pant as we ran and which rendered speaking no longer the easy thing it had been. Larger grew the sunlit circle above us and larger, and all the nearer tunnel sank into a rim of indistinguishable black. We saw the dead bayonet shrub no longer with any touch of green in it, but brown and dry and thick, and the shadow of its upper branches high out of sight made a densely interlaced pattern upon the tumbled rocks. And at the immediate mouth of the tunnel was a wide trampled space where the mooncalves had come and gone.

We came out upon this space at last into a light and heat that hit and pressed upon us. We traversed the exposed area painfully, and clambered up a slope among the scrub-stems, and sat down at last panting in a high place beneath the shadow of a mass of twisted lava. Even in the shade the rock felt hot.

The air was intensely hot, and we were in great physical discomfort, but for all that we were no longer in a nightmare. We seemed to have come to our own province again, beneath the stars. All the fear and stress of our flight through the dim passages and fissures below had fallen from us. That last fight had filled us with an enormous confidence in ourselves so far as the Selenites were concerned. We looked back almost incredulously at the black opening from which we has just emerged. Down there, in a blue glow that now in our memories seemed the next thing to absolute darkness, we had met with things like mad mockeries of men, helmet-headed creatures, and had walked in fear before them, and had submitted to them until we could submit no longer. And behold, they had smashed like wax and scattered like chaff, and fled and vanished like the creatures of a dream!

I rubbed my eyes, doubting whether we had not slept and dreamt these things by reason of the fungus we had eaten, and suddenly discovered the blood upon my face, and then that my shirt was sticking painfully to my shoulder and arm.

"Confound it!" I said, gauging my injuries with an in-

vestigatory hand, and suddenly that distant tunnel-mouth became, as it were, a watching eye.

"Cavor!" I said, "what are they going to do now? And what are we going to do?"

He shook his head, with his eyes fixed upon the tunnel. "How can one tell what they will do?"

"It depends on what they think of us, and I don't see how we can begin to guess that. And it depends upon what they have in reserve. It's as you say, Cavor: we have touched the merest outside of this world. They may have all sorts of things inside here. Even with those shooting things they might make it bad for us. . . .

"Yet, after all," I said, "even if we don't find the sphere at once, there is a chance for us. We might hold out. Even through the night. We might go down there again and make a fight for it."

I stared about me with speculative eyes. The character of the scenery had altered altogether by reason of the enormous growth and subsequent drying of the scrub. The crest on which we sat was high and commanded a wide prospect of the crater and landscape and we saw it now all sere and dry in the late autumn of the lunar afternoon. Rising one behind the other were long slopes and fields of trampled brown where the mooncalves had pastured, and far away in the full blaze of the sun a drove of them basked slumberously, scattered shapes, each with a blot of shadow against it like sheep on the side of a down. But not a sign of Selenite was to be seen. Whether they had fled on our emergence from the interior passages or whether they were accustomed to retire after driving out the mooncalves I cannot guess. At the time I believed the former was the case.

"If we were to set fire to all this stuff," I said, "we might find the sphere among the ashes."

Cavor did not seem to hear me. He was peering under his hand at the stars, that still, in spite of the intense sunlight, were abundantly visible in the sky. "How long do you think we have been here?" he asked at last.

"Been where?"

"On the moon."

"Two earthly days, perhaps."

"More nearly ten. Do you know, the sun is past its zenith, and sinking in the west? In four days' time or less it will be night."

"But—we've only eaten once!"

"I know that. And—but there are the stars!"

"But why should time seem different because we are on a smaller planet?"

"I don't know. There it is!"

"How does one tell time?"

"Hunger—fatigue—all those things are different. Every-

thing is different. Everything. To me it seems that since first we came out of the sphere it has been only a question of hours—long hours. At most."

"Ten days," I said; "that leaves——" I looked up at the sun for a moment and then saw that it was half-way from the zenith to the western edge. "Four days! . . . Cavor, we mustn't sit here and dream. How do you think we can begin?"

I stood up. "We must get a fixed point which we can recognise. We might hoist a flag, or a handkerchief or something—and quarter the ground and work round that."

He stood up beside me.

"Yes," he said, "there is nothing for it but to hunt for the sphere. Nothing. We may find it—certainly we may find it. And if not——"

"We must keep on looking."

He looked this way and that, glanced up at the sky and down at the tunnel and astonished me by a sudden gesture of impatience. "Oh! but we have done foolishly! To have come to this pass! Think how it might have been and the things we might have done!"

"We may do something yet."

"Never the thing we might have done. Here below our feet is a world. Think of what that world must be! Think of that machine we saw and the lid and the shaft! They were just remote outlying suggestions, and those creatures we have seen and fought with, no more than ignorant peasants, dwellers in the outskirts, yokels and labourers, half akin to brutes. Down below! Caverns beneath caverns, tunnels, structures, ways. . . . It must open out and be greater and wider and more populous as one descends. Assuredly. Right down at last to the central sea that washes round the core of the moon. Think of its inky waters under the spare lights! If indeed their eyes need lights. Think of the cascading tributaries pouring down their channels to feed it. Think of the tides upon its surface and the rush and swirl of its ebb and flow. Perhaps they have ships that go upon it, perhaps down there are mighty cities and swarming ways and wisdom and order passing the wit of man. And we may die here upon it and never see the masters who must be—ruling over these things! We may freeze and die here and the air will freeze and thaw upon us, and then——! They will come upon us, come on our stiff and silent bodies and find the sphere we cannot find and they will understand at last, too late, all the thought and effort that ended here in vain!" His voice through all that speech sounded like the voice of some one heard in a telephone, weak and far away.

"But the darkness," I said.

"One might get over that."

"How?"

"I don't know. How am I to know? One might carry a torch, one might have a lamp—— The others—might understand."

He stood for a moment with his hands held down and a rueful face, staring out over the waste that defied him. Then with a gesture of renunciation he turned towards me with proposals for the systematic hunting of the sphere.

"We can return," I said.

He looked about him. "First of all we shall have to get to earth."

"We could bring back lamps to carry and climbing irons and a hundred necessary things."

"Yes," he said.

"We can take back an earnest of success in this gold."

He looked at my golden crowbars and said nothing for a space. He stood with his hands clasped behind his back staring across the crater. At last he sighed and spoke. "It was I found the way here, but to find a way isn't always to be master of a way. If I take my secret back to earth what will happen? I do not see how I can keep my secret for a year, for even a part of a year. Sooner or later it must come out, even if other men rediscover it. And then . . . Governments and powers will struggle to get hither, they will fight against one another and against these moon people. It will only spread warfare and multiply the occasions of war. In a little while, in a very little while if I tell my secret, this planet to its deepest galleries will be strewn with human dead. Other things are doubtful, but that is certain. . . . It is not as though man had any use for the moon. What good would the moon be to men? Even of their own planet what have they made but a battle-ground and theatre of infinite folly? Small as his world is, and short as his time, he has still in his little life down there far more than he can do. No! Science has toiled too long forging weapons for fools to use. It is time she held her hand. Let him find it out for himself again—in a thousand years' time."

"There are methods of secrecy," I said.

He looked up at me and smiled. "After all," he said, "why should one worry? There is little chance of our finding the sphere, and down below trouble is brewing for us. It's simply the human habit of hoping till we die, that makes us think of return. Our troubles are only beginning. We have shown these moonfolk violence, we have given them a taste of our quality, and our chances are about as good as a tiger's that has got loose and killed a man in Hyde Park. The news of us must be running down from gallery to gallery, down towards the central parts. . . . No sane beings will ever let us take that sphere back to earth, after so much as they have seen of us."

"We aren't improving our chances," said I, "by sitting here."

We stood up side by side.

"After all," he said, "we must separate. We must fasten up a handkerchief on these tall spikes here and stick it firmly and from this as a centre we must work over the crater. You must go westward, moving out in semicircles to and from the setting sun. You must move first with your shadow on your right until it is at right angles with the direction of your handkerchief and then with your shadow on your left. And I will do the same to the east. We will look into every gully, examine every skerry of rocks, we will do all we can to find my sphere. If we see Selenites we will hide from them as well as we can. For drink we must take snow, and if we feel the need of food we must kill a moon-calf, if we can, and eat such flesh as it has—raw, and so each will go his own way."

"And if one of us comes upon the sphere?"

"He must come back to the white handkerchief and stand by it and signal to the other."

"And if neither—— ?"

Cavor glanced up at the sun. "We go on seeking until the night and cold overtake us."

"Suppose the Selenites have found the sphere and hidden it?"

He shrugged his shoulders.

"Or if presently they come hunting us?"

He made no answer.

"You had better take a club," I said.

He shook his head and stared away from me across the waste.

But for a moment he did not start. He looked round at me shyly, hesitated. "*Au revoir*," he said.

I felt an odd stab of emotion. A sense of how we had galled each other and particularly how I must have galled him came to me. "Confound it!" thought I, "we might have done better!" I was on the point of asking him to shake hands—for that was how I felt just then—when he put his feet together and leaped away from me towards the north. He drifted through the air as a dead leaf would do, fell lightly and leaped again. I stood for a moment watching him, then faced westward reluctantly, pulled myself together, and, with something of the feeling of a man who leaps into icy water, selected a point and plunged forward to explore my solitary half of the moon world. I dropped rather clumsily among rocks, stood up and looked about me, clambered to a rocky slab and leaped again. . . . When presently I looked for Cavor he was hidden from my eyes, but the handkerchief showed out bravely on its headland, white in the blaze of the sun.

I determined not to lose sight of that handkerchief whatever might betide.

CHAPTER EIGHTEEN

MR. BEDFORD ALONE

In a little while it seemed to me as if I had always been alone on the moon. I hunted for a time with a certain intentness, but the heat was still very great and the thinness of the air felt like a hoop about one's chest. I came presently into a hollow basin bristling with tall brown dry fronds about its edge and I sat down under these to rest and cool. I intended to stay for only a little while. I put down my club beside me and sat resting my chin on my hands. I saw with a colourless interest that the rocks of the basin, where here and there the crackling dry lichens had shrunk away to show them, were all veined and splattered with gold, that here and there bosses of rounded and wrinkled gold projected from among the litter. What did that matter now? A sort of languor had possession of my limbs and mind, I did not believe for a moment that we should ever find the sphere in that vast desiccated wilderness. I seemed to lack a motive for effort until the Selenites should come. Then I supposed I should exert myself, obeying that unreasonable imperative that urges a man before all things to preserve and defend his life, albeit he may preserve it only to die more painfully in a little while.

Why had we come to the moon?

The thing presented itself to me as a perplexing problem. What is this spirit in man that urges him for ever to depart from happiness and security, to toil, to place himself in danger, even to risk a reasonable certainty of death? It dawned upon me up there in the moon as a thing I ought always to have known, that man is not made simply to go about being safe and comfortable and well fed and amused. Against his interest, against his happiness he is constantly being driven to do unreasonable things. Some force not himself impels him and go he must. But why? Why? Sitting there in the midst of that useless moon gold, amidst the things of another world, I took count of all my life. Assuming I was to die a castaway upon the moon, I failed altogether to see what purpose I had served; I got no light on that point, but it was clearer to me than it had ever been in my life before that I was not serving my own purpose; that all my life I had in truth never served the purposes of my private life. Whose purpose was I serving? . . . I ceased to speculate on why we had come to the moon and took a wider sweep. Why had I come to the earth? Why had I a private life at all? . . . I lost myself at last in bottomless speculation.

My thoughts became vague and cloudy, no longer leading

in definite directions. I had not felt heavy or weary—I cannot imagine one doing so upon the moon—but I suppose I was greatly fatigued. At any rate I slept.

Slumbering there rested me greatly, and the sun was setting and the violence of the heat abating through all the time I slumbered. When at last I was roused from my slumbers by a remote clamour, I felt active and capable again. I rubbed my eyes and stretched my arms. I rose to my feet—I was a little stiff—and at once prepared to resume my search. I shouldered my golden clubs one on each shoulder and went on out of the ravine of the gold-veined rocks.

The sun was certainly lower, much lower than it had been, the air was very much cooler. I perceived I must have slept some time. It seemed to me that a faint touch of misty blueness hung about the western cliff. I leaped to a little boss of rock, and surveyed the crater. I could see no signs of mooncalves or Selenites, nor could I see Cavor, but I could see my handkerchief afar off spread out on its thicket of thorns. I looked about me, and then sprang forward to the next convenient viewpoint.

I beat my way round in a semicircle and back again in a still remoter crescent. It was very fatiguing and hopeless. The air was really very much cooler and it seemed to me that the shadow under the westward cliff was growing broad. Ever and again I stopped and reconnoitred, but there was no sign of Cavor, no sign of Selenites, and it seemed to me the mooncalves must have been driven in to the interior again—I could see none of them. I became more and more desirous of seeing Cavor. The winged outline of the sun had sunk now until it was scarcely the distance of its diameter from the rim of the sky. I was oppressed by the idea that the Selenites would presently close their lids and valves and shut us out under the inexorable onrush of the lunar night. It seemed to me high time that he abandoned his search and that we took counsel together. I felt how urgent it was that we should decide soon as to our course. We had failed to find the sphere, we no longer had time to seek it. Once these valves were closed, with us outside, we were lost men. The great night of space would descend upon us, that blackness of the void which is the only absolute death. All my being shrank from that approach. We must get into the moon again, though we were slain in doing it. I was haunted by a vision of our freezing to death, of our hammering with our last strength on the valve of the great pit.

I took no thought any more of the sphere. I thought only of finding Cavor again. I was half inclined to go back into the moon without him rather than seek him until it was too late. I was already half-way back towards our handkerchief, when suddenly——

I saw the sphere!

I did not find it so much as it found me. It was lying much farther to the westward than I had gone and the sloping rays of the sinking sun reflected from its glass had suddenly proclaimed its presence in a dazzling beam. For an instant I thought this was some new device of the Selenites against us, and then I understood.

I threw up my arms, shouted a ghostly shout and set off in vast leaps towards it. I missed one of my leaps and dropped into a deep ravine and twisted my ankle and after that I stumbled at almost every leap. I was in a state of hysterical agitation, trembling violently and quite breathless long before I got to it. Three times at least I had to stop with my hands resting on my sides, and in spite of the thin dryness of the air the perspiration was wet upon my face.

I thought of nothing but the sphere until I reached it, I forgot even my trouble of Cavor's whereabouts. My last leap flung me with my hands hard against its glass; then I lay against it panting and trying vainly to shout "Cavor! Here is the sphere!" When I had recovered a little I peered through the thick glass and the things inside seemed tumbled. I stooped to peer closer. Then I attempted to get in. I had to hoist it over a little to get my head through the manhole. The screw stopper was inside and I could see now that nothing had been touched, nothing had suffered. It lay there as we had left it when we had dropped out amidst the snow. For a time I was wholly occupied in making and remaking this inventory. I found I was trembling violently. It was good to see that familiar dark interior again! I cannot tell you how good. Presently I crept inside and sat down among the things. I looked through the glass at the moon world and shivered. I placed my gold clubs upon the bale and sought out and took a little food, not so much because I wanted it but because it was there. Then it occurred to me that it was time to go out and signal for Cavor. But I did not go out and signal for Cavor forthwith. Something held me to the sphere.

After all, everything was coming right. There would still be time for us to get more of the magic stone that gives one mastery over men. There was gold for the picking up, and the sphere would travel as well half full of gold as though it were empty. We could go back now masters of ourselves and our world, and then——

I roused myself at last and with an effort got myself out of the sphere. I shivered as I emerged, for the evening air was growing very cold. I stood in the hollow, staring about me. I scrutinised the bushes round me very carefully before I leaped to the rocky shelf hard by and took once more what had been my first leap in the moon. But this time I made it with no effort whatever.

The growth and decay of the vegetation had gone on apace and the whole aspect of the rocks had changed, but still it was possible to make out the slope on which the seeds had germinated and the rocky mass from which we had taken our first view of the crater. But the spiky shrub on the slope stood brown and sere now and thirty feet high, and cast long shadows that stretched out of sight; and the little seeds that clustered in its upper branches were brown and ripe. Its work was done, it was brittle and ready to fall and crumple under the freezing air, so soon as the nightfall came. And the huge cacti that had swollen as we watched them had long since burst and scattered their spores to the four quarters of the moon. Amazing little corner in the universe—the landing-place of men!

Some day, thought I, I will have an inscription standing there right in the midst of the hollow. It came to me if only this teeming world within could know of the full import of that moment how curious its tumult would become!

But as yet it could scarcely be dreaming of the significance of our coming. For if it did the crater would surely be an uproar of pursuit. I looked about for some place from which I might signal to Cavor, and saw that same patch of rock to which he had leaped from my present standpoint still bare and barren in the sun. For a moment I hesitated at going so far from the sphere. Then with a pang of shame at that hesitation I leaped. . . .

From this vantage point I surveyed the crater again. Far away at the top of the enormous shadow I cast was the little white handkerchief fluttering on the bushes. It was very little and very far. Cavor was not in sight. It seemed to me that by this time he ought to be looking for me. That was the agreement. But he was nowhere to be seen.

I stood waiting and watching, hands shading my eyes, expecting every moment to distinguish him. Very probably I stood there for a long time. I tried to shout and was reminded of the thinness of the air. I made an undecided step back towards the sphere. But a lurking dread of the Selenites made me hesitate to signal my whereabouts by hoisting one of our sleeping blankets on to the adjacent scrub. My eyes searched the crater again.

It had an effect of emptiness that chilled me. All sound of the Selenites in the world beneath had died away. It was as still as death. Save for the faint stir of the scrub about me in the little breeze that was rising, there was no sound, no shadow of a sound. And the breeze blew chill.

Confound Cavor!

I took a deep breath. I put my hands to the sides of my mouth. "Cavor!" I bawled and the sound was like some mannikin shouting far away.

I looked at the handkerchief, I looked behind me at the

broadening shadow of the westward cliff, I looked under my hand at the sun. It seemed to me that almost visibly it was creeping down the sky.

I felt I must act instantly if I was to save Cavor. I whipped off my vest and flung it as a mark on the sere bayonets of the shrubs behind me, and then set off in a straight line towards the handkerchief. Perhaps it was a couple of miles away—a matter of a few hundred leaps and strides. I have already told how one seemed to hang through those lunar leaps. In each suspense I sought Cavor and marvelled why he should be hidden. In each leap I could feel the sun setting behind me. Each time I touched the ground I was tempted to go back.

A last leap and I was in the depression below our handkerchief, a stride and I stood on our former vantage point within arm's reach of it. I stood up straight and scanned the world about me, between its lengthening bars of shadow. Far away, down a long declivity was the opening of the tunnel up which we had fled, and my shadow reached towards it, reached towards it and touched it like a finger of the night.

Not a sign of Cavor, not a sound in all the stillness, only that the stir and waving of the scrub and of the shadows increased. And suddenly and violently I shivered. "Cav'——" I began, and realised once more the uselessness of the human voice in that thin air.

Silence. The silence of death.

Then it was my eye caught something—a little thing, lying perhaps fifty yards away down the slope, amidst a litter of bent and broken branches. What was it? I knew, and yet for some reason I would not know.

I went nearer to it. It was the little cricket cap Cavor had worn. I did not touch it. I stood looking at it.

I saw then that the scattered branches about it had been forcibly smashed and trampled. I hesitated, stepped forward and picked it up.

I stood with Cavor's cap in my hand, staring at the trampled reeds and thorns about me. On some of them were little smears of something dark, something that I dared not touch. A dozen yards away, perhaps, the rising breeze dragged something into view, something small and vividly white.

It was a little piece of paper crumpled as though it had been clutched tightly. I picked it up, and on it were smears of red. My eye caught faint pencil marks. I smoothed it out and saw uneven and broken writing ending at last in a crooked streak upon the paper.

I set myself to decipher this.

"I have been injured about the knee, I think my knee-cap is hurt, and I cannot run or crawl," it began—pretty distinctly written.

Then less legibly: "They have been chasing me for some time and it is only a question of"—the word "time" seemed

to have been written here and erased in favour of something illegible—" before they get me. They are beating all about me."

Then the writing became convulsive. "I can hear them," I guessed the tracing meant; and then it was quite unreadable for a space. Then came a little string of words that were quite distinct, "a different sort of Selenite altogether, who appear to be directing the——" The writing became a mere hasty confusion again.

"They have larger brain cases—much larger, and slender bodies and very short legs. They make gentle noises and move with organised deliberation. . . .

"And though I am wounded and helpless here, their appearance still gives me hope." That was like Cavor. "They have not shot at me or attempted—injury. I intend——"

Then came the sudden streak of the pencil across the paper, and on the back and edges—blood!

And as I stood there, stupid and perplexed, with this dumbfounding relic in my hand, something very, very soft and light and chill touched my hand for a moment and ceased to be, and then a thing, a little white speck drifted athwart a shadow. It was a tiny snowflake, the first snowflake, the herald of the night.

I looked up with a start and the sky had darkened now almost to blackness and was thick with a gathering multitude of coldly watchful stars. I looked eastward, and the light of that shrivelled world was touched with a sombre bronze, westward, and the sun—robbed now by a thickening white mist of half its heat and splendour—was touching the crater rim, was sinking out of sight, and all the shrubs and jagged and tumbled rocks stood out against it in a bristling disorder of black shapes. Into the great lake of darkness westward, a vast wreath of mist was sinking. A cold wind set all the crater shivering. Suddenly for a moment I was in a puff of falling snow and all the world about me grey and dim.

And then it was I heard, not loud and penetrating as at first, but faint and dim like a dying voice, that tolling, that same tolling that had welcomed the coming of the day: Boom. . . . Boom. . . . Boom. . . .

It went about the crater; it seemed to throb with the throbbing of the greater stars; the blood-red crescent of the sun's disk sank as it tolled out: Boom. . . . Boom. . . . Boom. . . .

What had happened to Cavor? All through that tolling I stood there stupidly, and at last the tolling ceased. And suddenly the open mouth of the tunnel down below there shut like an eye and vanished out of sight.

Then indeed was I alone.

Over me, about me, closing in on me, embracing me ever nearer, was the Eternal, that which was before the beginning

and that which triumphs over the end ; that enormous void in which all light and life and being is but the thin and vanishing splendour of a falling star, the cold, the stillness, the silence—the infinite and final Night of space.

The sense of solitude and desolation became the sense of an overwhelming Presence, that stooped towards me, that almost touched me.

"No," I cried, "no ! Not yet ! not yet ! Wait. Wait ! Oh wait ! " My voice went up to a faint shriek. I flung the crumpled paper from me, scrambled back to the crest to take my bearings, and then, with all the will that was in me, leaped out towards the mark I had left, dim and distant now in the very margin of the shadow.

Leap, leap, leap, and each leap was seven ages.

Before me the pale serpent-girdled sector of the sun sank and sank and the advancing shadow swept to seize the sphere before I could reach it. I was two miles away—a hundred leaps or more—and the air about me was thinning out as it thins under an air pump, and the cold was gripping at my joints. But had I died, I should have died leaping. Once, and then again my foot slipped on the gathering snow and shortened my leap ; once I fell short into bushes that crashed and smashed into dusty chips and nothingness, and once I stumbled as I dropped and rolled head over heels into a gully and rose bruised and bleeding and confused as to my direction.

But such incidents were as nothing to the intervals, those awful pauses when one drifted through the air towards that pouring tide of night. My breathing made a piping noise, and it was as though knives were whirling in my lungs. My heart seemed to beat against the top of my brain. "Shall I reach it ? Oh Heaven ! shall I reach it ? "

My whole being became anguish.

"Lie down," screamed my pain and despair, "lie down."

The nearer I struggled, the more impossibly remote it seemed. I was numb, I stumbled, I bruised and cut myself and did not bleed.

It was in sight.

I fell on all fours and my lungs whooped.

I crawled. The frost gathered on my lips, icicles hung from my moustache and beard, I was white with the freezing atmosphere.

I was a dozen yards from it. My eyes had become dim. "Lie down," screamed despair, "lie down ! "

I touched it and halted. "Too late ! " screamed despair "lie down ! "

I fought stiffly with it. I was on the manhole lip, a stupefied, half dead being. The snow was all about me. I pulled myself in. There lurked within a little warmer air. The snowflakes—the airflakes—danced in about me, as I tried with chilling hands to thrust the valve in and spin it tight and hard.

I sobbed, "I *will*." I chattered on my teeth. And then with fingers that quivered and felt brittle I turned to the shutter studs.

As I fumbled with the switches—for I had never controlled them before—I could see dimly through the steaming glass, the blazing red streamers of the sinking sun, dancing and flickering through the snowstorm and the black forms of the scrub thickening and bending and breaking beneath the accumulating snow. Thicker whirled the snow and thicker, black against the light. What if even now the switches overcame me ?

Then something clicked under my hands and in an instant that last vision of the moon world was hidden from my eyes. I was in the silence and darkness of the interplanetary sphere.

CHAPTER NINETEEN

MR. BEDFORD IN INFINITE SPACE

It was almost as though I had been killed. Indeed I could imagine a man suddenly and violently killed would feel very much as I did. One moment, a passion of agonising existence and fear; the next, darkness and stillness, neither light nor life nor sun, moon nor stars, the black Infinite. Although the thing was done by my own act, although I had already tasted this very effect in Cavor's company, I felt astonished, dumbfounded and overwhelmed. I seemed to be borne upwards into an enormous darkness. My fingers floated off the studs, I hung as if I were annihilated, and at last very softly and gently I came against the bale and the golden chain and the crowbars that had drifted to the middle of the sphere.

I do not know how long that drifting took. In the sphere, of course, even more than on the moon one's earthly time-sense was ineffectual. At the touch of the bale it was as if I had awakened from a dreamless sleep. I immediately perceived that if I wanted to keep awake and alive I must get a light or open a window so as to get a grip of something with my eyes. And besides I was cold. I kicked off from the bale therefore, clawed on to the thin cords within the glass, crawled along until I got to the manhole rim, and so got my bearings for the light and blind studs, took a shove off, and flying once round the bale and getting a scare from something big and flimsy that was drifting loose, I got my hand on the cord quite close to the studs and reached them. I lit the little lamp first of all to see what it was I had collided with, and discovered that old copy of *Lloyd's News* had slipped its moorings, and was adrift in the void. That brought me out of the Infinite to my own proper dimensions again. It made me laugh and pant for a time and suggested the idea of a little oxygen from one of the cylinders. After that I lit the heater until I felt warm and then I took food. Finally I set to work in a very gingerly fashion on the Cavorite blinds to see if I could guess by any means how the sphere was travelling.

The first blind I opened I shut at once, and hung for a time flattened and blinded by the sunlight that had hit me. After thinking a little I started upon the windows at right angles to this one, and got the huge crescent moon and the second time the little crescent earth behind it. I was amazed to find how far I was from the moon. I had reckoned that not only should I have little or none of the "kick-off" that the earth's atmosphere had given us at our start, but that the tangential "fly off" of the moon's spin would be at least twenty-eight times less than the earth's. I had expected to discover myself

hanging over our crater and on the edge of the night, but all that was now only a part of the outline of the white crescent that filled the sky. And Cavor—— ?

He was already infinitesimal.

I tried to imagine what could have happened to him. But at that time I could think of nothing but death. I seemed to see him bent and smashed at the foot of some interminably high cascade of blue. And all about him the stupid insects stared. . . .

Under the inspiring touch of the drifting newspaper I became very practical again for awhile. It was quite clear to me that what I had to do was to get back to earth, but as far as I could see I was drifting away from it. Whatever had happened to Cavor, even if he was still alive, which seemed to me incredible after that blood-stained scrap, I was powerless to help him. There he was, living or dead behind the mantle of that rayless night, and there he must remain at least until I could summon our fellow-men to his assistance. Should I do that ? Something of the sort I had in my mind ; to come back to earth, if it were possible, and then as maturer consideration might determine, either to show and explain the sphere to a few discreet persons and act with them, or else to keep my secret, sell my gold, obtain weapons, provisions and an assistant, and return with these advantages to deal on equal terms with the flimsy people of the moon ; to rescue Cavor if that were still possible, and at any rate to procure a sufficient supply of gold to place my subsequent proceedings on a firmer basis.

But that was hoping far ; I had first to get back. I set myself to decide just exactly how the return to earth could be contrived. As I struggled with that problem I ceased to worry about what I should do when I got there. My only care was to get back.

I puzzled out at last that my best chance would be to drop back towards the moon as near as I dared in order to gather velocity, then to shut my windows and fly behind it, and when I was past to open my earthward windows and so get off at a good pace homeward. But whether I should ever reach the earth by that device or whether I might simply find myself spinning about it in some hyperbolic or parabolic curve or other, I could not tell. Later I had a happy inspiration, and by opening certain windows to the moon, which had appeared in the sky in front of the earth, I turned my course aside so as to head off the earth, behind which, without some such expedient it had become evident to me I must pass. I did a very great deal of complicated thinking over these problems—for I am no mathematician—and in the end I am certain it was much more my good luck than my reasoning that enabled me to hit the earth. Had I known then, as I know now, the mathematical chances that were against me, I doubt if I

should have troubled even to touch the studs to make any attempt. And having puzzled out what I considered the thing to do, I opened all my moonward windows, and squatted down —the effort lifted me for a time some foot or so into the air and I hung there in the oddest way—and waited for the crescent to get bigger and bigger until I felt I was near enough for safety. Then I would shut the windows, fly past the moon with the velocity I had got from it—if I did not smash upon it—and so go on towards the earth.

And that is what I did.

At last I felt my moonward start was sufficient, I shut out the sight of the moon from my eyes, and in a state of mind that was, I now recall, incredibly free from anxiety or any distressful quality, I sat down to begin a vigil in that little speck of matter in infinite space that would last until I should strike the earth. The heater had made the sphere tolerably warm, the air had been refreshed by the oxygen, and except for that faint congestion of the head that was always with me while I was away from earth, I felt entire physical comfort. I had extinguished the light again lest it should fail me in the end ; I was in darkness save for the earthshine and the glitter of the stars below me. Everything was so absolutely silent and still that I might indeed have been the only being in the universe, and yet, strangely enough, I had no more feeling of loneliness or fear than if I had been lying in bed on earth. Now this seems all the stranger to me since during my last hours in the crater of the moon the sense of my utter loneliness had been an agony. . . .

Incredible as it will seem, this interval of time that I spent in space has no sort of proportion to any other interval of time in my life. Sometimes it seemed as though I sat through immeasurable eternities like some god upon a lotus leaf, and again as though there was a momentary pause as I journeyed from moon to earth. In truth, it was altogether some weeks of earthly time. But I had done with care and anxiety, hunger or fear, for that space. I floated, thinking with a strange breadth and freedom of all that we had undergone and of all my life and motives and the secret issues of my being. I seemed to myself to have grown greater and greater, to have lost all sense of movement, to be floating amidst the stars ; and always the sense of earth's littleness and the infinite littleness of my life upon it, was in my thoughts.

I can't profess to explain what happened in my mind. No doubt it could all be traced directly or indirectly to the curious physical conditions under which I was living. I set it down here just for what it is worth and without any comment. The most prominent quality of it was a pervading doubt of my own identity. I became, if I may so express it, dissociate from Bedford, I looked down on Bedford as a trivial incidental thing with which I chanced to be connected, I saw Bedford

in many relations—as an ass or as a poor beast where I had hitherto been inclined to regard him with a quiet pride as a very spirited and rather forcible person. I saw him not only as an ass, but as the son of many generations of asses. I reviewed his school days and his early manhood and his first encounter with love very much as one might review the proceedings of an ant in the sand. . . . I regret that something of that period of lucidity still hangs about me, and I doubt if I shall ever recover the full-bodied self-satisfaction of my early days. But at the time, the thing was not in the least painful, because I had that extraordinary persuasion that as a matter of fact I was no more Bedford than I was any one else, but only a mind floating in the still serenity of space. Why should I be disturbed about this Bedford's shortcomings ? I was not responsible for him or them.

For a time I struggled against this really very grotesque delusion. I tried to summon the memory of vivid moments, of tender or intense emotions to my assistance ; I felt that if I could recall one genuine twinge of feeling the growing rupture would be stopped. But I could not do it. I saw Bedford rushing down Chancery Lane, hat on the back of his head, coat tails flying out, *en route* for his public examination. I saw him dodging and bumping against and even saluting other similar little creatures in that swarming gutter of people. Me ? I saw Bedford that same evening in the sitting-room of a certain lady, and his hat was on the table beside him and it badly wanted brushing and he was in tears. Me ? I saw him with that lady in various attitudes and emotions—I never felt so detached before. . . . I saw him hurrying off to Lympne to write a play, and accosting Cavor, and in his shirt sleeves working at the sphere, and walking out to Canterbury because he was afraid to come. Me ? I did not believe it.

I still reasoned that all this was hallucination due to my solitude and the fact that I had lost all weight and sense of resistance. I had endeavoured to recover that sense by banging myself about the sphere, by pinching my hands and clasping them together. Among other things I lit the light, captured that torn copy of *Lloyds'* and read those convincingly realistic advertisements again, about the Cutaway bicycle, and the gentleman of private means and the lady in distress who was selling those "forks and spoons." There was no doubt *they* existed surely enough, and, said I : "This is your world, and you are Bedford and you are going back to live among things like that for all the rest of your life." But the doubts within me could still argue : "It is not you that is reading, it is Bedford—but *you are not Bedford*, you know. That's just where the mistake comes in."

"Confound it ! " I cried, "and if I am not Bedford, what *am* I ? "

But in that direction no light was forthcoming, though the strangest fancies came drifting into my brain, queer remote suspicions like shadows seen from far away. . . . Do you know I had an idea that really I was something quite outside not only the world, but all worlds, and out of space and time, and that this poor Bedford was just a peephole through which I looked at life. . . .

Bedford! However I disavowed him, there I was most certainly bound up with him, and I knew that wherever and whatever I might be I must needs feel the stress of his desires and sympathise with all his joys and sorrows until his life should end. And with the dying of Bedford—what then? . . .

Enough of this remarkable phase of my experiences. I tell it here simply to show how one's isolation and departure from this planet touched not only the functions and feeling of every organ of the body but indeed also the very fabric of the mind with strange and unanticipated disturbances. All through the major portion of that vast space-journey I hung thinking of such immaterial things, hung dissociated and apathetic, a cloudy megalomaniac as it were, amidst the stars and planets in the void of space, and not only the world to which I was returning, but the blue-lit caverns of the Selenites, their helmet faces, their gigantic and wonderful machines, and the fate of Cavor, dragged helpless into that world, were facts infinitely minute and altogether trivial.

Until at last I began to feel the pull of the earth upon my being, drawing me back again to the life that is real for men. And then indeed it grew clearer and clearer to me that I was quite certainly Bedford after all, and returning after amazing adventures to this world of ours, and with a life that I was very likely to lose in this return. I set myself to puzzle out the conditions under which I must fall to earth.

CHAPTER TWENTY

MR. BEDFORD AT LITTLESTONE

My line of flight was about parallel with the surface as I came into the upper air. The temperature of the sphere began to rise forthwith. I knew it behoved me to drop at once. Far below me in a darkling twilight stretched a great expanse of sea. I opened every window I could and fell—out of sunshine into evening and out of evening into night. Vaster grew the earth and vaster, swallowing up the stars, and the silvery translucent starlit veil of cloud it wore spread out to catch me. At last the world seemed no longer a sphere, but flat, and then concave. It was no longer a planet in the sky, but the world of Man. I shut all but an inch or so of earthward window and dropped with a slackening velocity. The broadening water, now so near that I could see the dark glitter of the waves, rushed up to meet me. I snapped the last strip of window and sat scowling and biting my knuckles waiting for the impact. . . .

The sphere hit the water with a huge splash: it must have sent it fathoms high. At the splash I flung the Cavorite shutters open. Down I went, but slower and slower, and then I felt the sphere pressing against my feet and so drove up again as a bubble drives. And at the last I was floating and rocking upon the surface of the sea and my journey in space was at an end.

The night was dark and overcast. Two yellow pin-points far away showed the passing of a ship, and nearer was a red glare that came and went. Had not the electricity of my glow-lamp exhausted itself, I could have got picked up that night. In spite of the inordinate fatigue I was beginning to feel, I was excited now and for a time hopeful in a feverish, impatient way that so my travelling might end.

But at last I ceased to move about, and sat, wrists on knees, staring at a distant red light. It swayed up and down, rocking, rocking. My excitement passed. I realised I had yet to spent at least another night in the sphere. I perceived myself infinitely heavy and fatigued. And so I fell asleep.

A change in my rhythmic motion awakened me. I peered through the refracting glass and saw that I had come aground upon a huge shallow of sand. Far away I saw houses and trees, and seaward a curved vague distortion of a ship hung between sea and sky.

I stood up and staggered. My one desire was to emerge. The manhole was upward and I wrestled with the screw. Slowly I opened the manhole. At last the air was singing in again as once it had sung out. But this time I did not wait until the pressure was adjusted. In another moment I had

the weight of the window on my hands and it was open, wide open, to the old familiar sky of earth.

The air hit me on the chest so that I gasped. I dropped the glass screw. I cried out, put my hands to my chest and sat down. For a time I was in pain. Then I took deep breaths. At last I could rise and move about again.

I tried to thrust my head through the manhole, and the sphere rolled over. It was as though something had lugged my head down as it emerged. I ducked back sharply or I should have been pinned face under water. After some wriggling and shoving I managed to crawl out upon sand, over which the retreating waves still came and went.

I did not attempt to stand up. It seemed to me that my body must be suddenly changed to lead. Mother Earth had her grip on me now—no Cavorite intervening. I sat down heedless of the water that came over my feet.

It was dawn, a grey dawn, rather overcast but showing here and there a long patch of greenish grey. Some way out a ship was lying at anchor, a pale silhouette of a ship with one yellow light. The water came rippling in in long shallow waves. Away to the right curved the land, a shingle bank with little hovels, and at last a lighthouse, a sailing mark and a point. Inland stretched a space of level sand, broken here and there by pools of water and ending a mile away perhaps in a low shore of scrub. To the north-east some isolated watering-place was visible; a row of gaunt lodging houses, the tallest objects that I could see on earth, dull dabs against the brightening sky. What strange men can have reared these vertical piles in such an amplitude of space I do not know. There they are like pieces of Brighton lost in the waste.

For a long time I sat there, yawning and rubbing my face. At last I struggled to rise. It made me feel that I was lifting a weight. I stood up.

I stared at the distant houses. For the first time since our starvation in the crater I thought of earthly food. "Bacon," I whispered, "eggs. Good toast and good coffee. . . . And how the devil am I going to get all this stuff to Lympne?" I wondered where I was. It was an east shore, anyhow, and I had seen Europe before I dropped.

I heard footsteps crunching in the sand and a little round-faced friendly-looking man in flannels, with a bathing towel wrapped about his shoulders and his bathing dress over his arm, appeared up the beach. I knew instantly that I must be in England. He was staring most intently at the sphere and me. He advanced, staring. I dare say I looked a ferocious savage enough—dirty, unkempt to an indescribable degree, but it did not occur to me at the time. He stopped at a distance of twenty yards. "Hul-lo, my man!" he said doubtfully.

"Hullo yourself!" said I.

He advanced reassured by that. "What on earth is that thing?" he asked.

"Can you tell me where I am?" I asked.

"That's Littlestone," he said, pointing to the houses; "and that's Dungeness! Have you just landed? What's that thing you've got? Some sort of machine?"

"Yes."

"Have you floated ashore? Have you been wrecked or something? What is it?"

I meditated swiftly. I made an estimate of the little man's appearance as he drew nearer. "By Jove!" he said, "you've had a time of it! I thought you—— Well—— Where were you cast away? Is that a sort of floating thing for saving life?"

I decided to take that line for the present. I made a few vague affirmatives. "I want help," I said hoarsely. "I want to get some stuff up the beach—stuff I can't very well leave about." I became aware of three other pleasant-looking young men with towels, blazers and straw hats coming down the sand towards me. Evidently the early bathing section of this Littlestone.

"Help!" said the young man; "rather!" He became vaguely active. "What particularly do you want done?" He turned round and gesticulated. The three young men accelerated their pace. In a minute they were about me plying me with questions I was disinclined to answer. "I'll tell all that later," I said. "I'm dead beat. I'm a rag."

"Come up to the hotel," said the foremost little man. "We'll look after that thing there."

I hesitated. "I can't," I said. "In that sphere there's two big bars of gold."

They looked incredulously at one another, then at me with a new inquiry. I went to the sphere, stooped, crept in and presently they had the Selenites' crowbars and the broken chain before them. If I had not been so horribly fagged I could have laughed at them. It was like kittens round a beetle. They didn't know what to do with the stuff. The fat little man stooped and lifted the end of one of the bars and then dropped it with a grunt. Then they all did.

"It's lead or gold!" said one.

"Oh, it's gold!" said another.

"Gold right enough," said the third.

Then they all stared at me and then they all stared at the ship lying at anchor.

"I say!" cried the little man. "But where did you get that?"

I was too tired to keep up a lie. "I got it in the moon."

I saw them stare at one another.

"Look here!" said I, "I'm not going to argue now.

Help me carry these lumps of gold up to the hotel—I guess with rests two of you can manage one and I'll trail this chain thing—and I'll tell you more when I've had some food."

"And how about that thing?"

"It won't hurt there," I said. "Anyhow—confound it! —it must stop there now. If the tide comes up, it will float all right."

And in a state of enormous wonderment these young men most obediently hoisted my treasures on their shoulders, and with limbs that felt like lead I headed a procession towards that distant fragment of "sea-front." Half-way there we were reinforced by two awe-stricken little girls with spades, and later appeared a lean little boy with a penetrating sniff. He was, I remember, wheeling a bicycle and he accompanied us at a distance of about a hundred yards on our right flank and then I suppose gave us up as uninteresting, mounted his bicycle and rode off over the level sands in the direction of the sphere.

I glanced back after him.

"He won't touch it," said the stout young man reassuringly, and I was only too willing to be reassured.

At first something of the grey of the morning was in my mind, but presently the sun disengaged itself from the level clouds of the horizon and lit the world and turned the leaden sea to glittering waters. My spirits rose. A sense of the vast importance of the things I had done and had yet to do came with the sunlight into my mind. I laughed aloud as the foremost man staggered under my gold. When indeed I took my place in the world, how amazed the world would be!

If it had not been for my inordinate fatigue the landlord of the Littlestone hotel would have been amusing as he hesitated between my gold and my respectable company on one hand and my filthy appearance on the other. But at last I found myself in a terrestrial bathroom once more; had warm water to wash myself with and a change of raiment, preposterously small indeed, but clean, that the genial little man had lent me. He lent me a razor, too, but I could not screw up my resolution to attack even the outposts of the bristling beard that covered my face.

I sat down to an English breakfast and ate with a sort of languid appetite, an appetite many weeks old and very decrepit, and stirred myself to answer the questions of the four young men. And I told them the truth.

"Well," said I, "as you press me—I got it in the moon."

"The moon?"

"Yes, the moon in the sky."

"But how do you mean?"

"What I say, confound it!"

"That you have just come from the moon?"

"Exactly! through space—in that ball." And I took a delicious mouthful of egg. I made a private note that when I went back to the moon I would take a box of eggs.

I could see clearly that they did not believe one word of what I told them, but evidently they considered me the most respectable liar they had ever met. They glanced at one another and then concentrated the fire of their eyes on me. I fancy they expected a clue to me in the way I helped myself to salt. They seemed to find something significant in my peppering my egg. Those strangely shaped masses of gold they had staggered under held their minds. There the lumps lay in front of me, each worth thousands of pounds and as impossible for any one to steal as a house or a piece of land. As I looked at their curious faces over my coffee-cup I realised something of the enormous wilderness of explanations into which I should have to wander to render myself comprehensible again.

"You don't really mean," began the youngest young man in the tone of one who speaks to an obstinate child.

"Just pass me that toast rack," I said, and shut him up completely.

"But look here, I say," began one of the others. "We're not going to believe that, you know."

"Ah, well," said I, and shrugged my shoulders.

"He doesn't want to tell us," said the youngest young man in a stage voice aside, and then with an appearance of great *sang-froid*: "You don't mind if I have a cigarette?"

I waved him a cordial assent, and proceeded with my breakfast. Two of the others went and looked out of the farther window and talked inaudibly. I was struck by a thought. "The tide," I said, "is running out?"

There was a pause as to who should answer me. "It's near the ebb," said the fat little man.

"Well, anyhow," I said, "it won't float far."

I decapitated my third egg and began a little speech. "Look here," I said. "Please don't imagine I'm surly or telling you uncivil lies or anything of that sort. I'm forced almost to be a little short and mysterious. I can quite understand this is as queer as it can be and that your imaginations must be going it. I can assure you, you're in at a memorable time. But I can't make it clear to you now—it's impossible. I give you my word of honour I've come from the moon, and that's all I can tell you. . . . All the same I'm tremendously obliged to you, you know, tremendously. I hope that my manner hasn't in any way given you offence."

"Oh no, not in the least!" said the youngest young man affably. "We can quite understand," and staring hard at me all the time he heeled his chair back until it very nearly upset, and recovered with some exertion. "Not a bit of it," said the fat young man. "Don't you imagine that!" and

they all got up and dispersed and walked about and lit cigarettes and generally tried to show they were perfectly amiable and disengaged and entirely free from the slightest curiosity about me and the sphere. "I'm going to keep an eye on that ship out there all the same," I heard one of them remarking in an undertone. If only they could have forced themselves to it they would, I believe, even have gone out and left me. I went on with my third egg.

"The weather," the fat little man remarked presently, "has been immense, has it not? I don't know when we have had such a summer. . . ."

Phoo-whizz! Like a tremendous rocket!

And somewhere a window was broken. . . .

"What's that?" said I.

"It isn't——?" cried the little man and rushed to the corner window.

All the others rushed to the window likewise. I sat staring at them.

Suddenly I leaped up, knocked over my third egg, and rushed for the window also. I had just thought of something. "Nothing to be seen there," cried the little man, rushing for the door.

"It's that boy!" I cried, bawling in hoarse fury; "it's that accursed boy!" and turning about I pushed the waiter aside—he was just bringing me some more toast—and rushed violently out of the room and down and out upon the queer little esplanade in front of the hotel.

The sea, which had been smooth, was rough now with hurrying cats'-paws, and all about where the sphere had been was tumbled water like the wake of a ship. Above, a little puff of cloud whirled like dispersing smoke, and the three or four people on the beach were staring up with interrogative faces towards the point of that unexpected report. And that was all! Boots and waiter and the four young men in blazers came rushing out behind me. Shouts came from windows and doors and all sorts of worrying people came into sight—agape.

For a time I stood there too overwhelmed by this new development to think of the people. At first I was too stunned to see the thing as any definite disaster—I was just stunned as a man is by some accidental violent blow. It is only afterwards he begins to appreciate his specific injury.

"Good Lord!"

I felt as though somebody was pouring funk out of a can down the back of my neck. My legs became feeble. I had got the first intimation of what the disaster meant for me. There was that confounded boy—sky high! I was utterly "left." There was the gold in the coffee-room, my only possession on earth. How would it all work out? The general effect was of a gigantic unmanageable confusion.

"I say," said the voice of the little man behind, "I say, you know."

I wheeled about and there were twenty or thirty people all bombarding me with dumb interrogation, with infinite doubt and suspicion. I felt the compulsion of their eyes intolerably. I groaned aloud.

"I *can't*," I shouted. "I tell you I can't! I'm not equal to it! You must puzzle and—and be damned to you!"

I gesticulated convulsively. He receded a step as though I had threatened him. I made a bolt through them into the hotel. I charged back into the coffee-room, rang the bell furiously. I gripped the waiter as he entered. "D'y hear?" I shouted. "Get help and carry these bars up to my room right away."

He failed to understand me and I shouted and raved at him. A scared looking little old man in a green apron appeared and two of the young men in flannels. I made a dash at them and commandereed their services. As soon as the gold was in my room I felt free to quarrel. "Now get out," I shouted; "all o' you get out if you don't want to see a man go mad before your eyes!" And I helped the waiter by the shoulder as he hesitated in the doorway. And then as soon as I had the door locked on them all I tore off the little man's clothes again, shied them right and left, and got into bed forthwith. And there I lay swearing and panting and cooling for a long time.

At last I was calm enough to get out of bed and ring up the round-eyed waiter for a flannel nightshirt, a soda and whisky and some good cigars. And these things being procured me after an exasperating delay that drove me several times to the bell, I locked the door again and proceeded very deliberately to look the entire situation in the face.

The net result of the great experiment presented itself as an absolute failure. It was a rout and I was the sole survivor. It was an absolute collapse and this was the final disaster. There was nothing for it but to save myself, and as much as I could in the way of prospects from our *débacle*. At one fatal crowning blow all my vague resolutions of return and recovery had vanished. My intention of going back to the moon, of getting a sphereful of gold and afterwards of having a fragment of Cavorite analysed and so recovering the great secret, perhaps finally even of recovering Cavor's body, all these ideas vanished altogether.

I was the sole survivor, and that was all.

I think that going to bed was one of the luckiest ideas I have ever had in an emergency. I really believe I should either have got looseheaded or done some fatal, indiscreet thing. But there, locked in and secure from all interruption

I could think out the position in all its bearings and make my arrangements at leisure.

Of course what had happened to the boy was quite clear to me. He had crawled into the sphere, meddled with the studs, shut the Cavorite windows and gone up. It was highly improbable he had screwed in the manhole stopper, and even if he had the chances were a thousand to one against his getting back. It was fairly evident that he would gravitate with my bales to somewhere near the middle of the sphere and remain there and so cease to be a legitimate terrestrial interest, however remarkable he might seem to the inhabitants of some remote quarter of space. I very speedily convinced myself on that point. And as for any responsibility I might have in the matter, the more I reflected the clearer it became that if only I kept quiet, I need not trouble myself about that. If I was faced by sorrowing parents demanding their lost boy, I had merely to demand my lost sphere—or ask them what they meant. At first I had had a vision of weeping parents and guardians and all sorts of complications, but now I saw that I simply had to keep my mouth shut and nothing in that way could arise. And indeed the more I lay and smoked and thought the more evident became the wisdom of impenetrability.

It is within the right of every British citizen, provided he does not commit damage nor indecorum, to appear suddenly wherever he pleases and as ragged and filthy as he pleases, and with whatever amount of virgin gold he sees fit to encumber himself, and no one has any right at all to hinder and detain him in this procedure. I formulated that at last to myself and repeated it over as a sort of private Magna Charta of my liberty.

Once I had put that issue on one side I could take up and consider in an equable manner certain considerations I had scarcely dared think of before, namely, those arising out of the circumstances of my bankruptcy. But now looking at this matter calmly and at leisure, I could see that if only I suppressed my identity by a temporary assumption of some less well-known name, and retained my two months' beard, the risks of any annoyance from the spiteful creditors to whom I have already alluded became very small indeed. From that to a definite course of rational worldly action was plain sailing. It was all amazingly petty, no doubt, but what was there remaining for me to do? Whatever I did I was resolved that I would keep myself level and right side up.

I ordered up writing materials and addressed a letter to the new Romney bank—the nearest, the waiter informed me—telling the manager I wished to open an account with him and requesting him to send two trustworthy persons properly authenticated in a cab with a good horse to fetch

some hundredweight of gold with which I happened to be encumbered. I signed the letter "Wells," which seemed to me to be a thoroughly respectable sort of name. This done, I got a Folkestone blue book, chose an outfitter, and asked him to send a cutter to measure me for a drab tweed suit, ordering at the same time a valise, dressing bag, brown boots, shirts, hats (to fit), and so forth, and from a watchmaker I also ordered a watch. And these letters being despatched, I had up as good a lunch as the hotel could give, and then lay smoking a cigar, as calm as possible until in accordance with my instructions two duly authenticated clerks came from the bank and weighed and took away my gold. After that I pulled the clothes over my ears in order to drown any knocking and went very comfortably to sleep.

I went to sleep. Do doubt it was a prosaic thing for the first man back from the moon to do, and I can imagine that the young and imaginative reader will find my behaviour disappointing. But I was horribly fatigued and bothered, and, confound it! what else was there to do? There certainly was not the remotest chance of my being believed, if I had told my story then, and it would certainly have subjected me to intolerable annoyances. I went to sleep. When at last I awoke I was ready to face the world, as I have always been accustomed to face it since I came to years of discretion. And so I got away to Italy and there it is I am writing this story. If the world will not have it as fact, then the world may take it as fiction. It is no concern of mine.

And now that the account is finished, I am amazed to think how completely this adventure is gone and done with. Everybody believes that Cavor was a not very brilliant scientific experimenter who blew up his house and himself at Lympne, and they explain the bang that followed my arrival at Littlestone by a reference to the experiments with explosives that are going on continually at the government establishment of Lydd, two miles away. I must confess that hitherto I have not acknowledged my share in the disappearance of Master Tommy Simmons, which was that little boy's name. That perhaps may prove a difficult bit of corroboration to explain away. They account for my appearance in rags with two bars of indisputable gold upon the Littlestone beach in various ingenious ways—it doesn't worry me what they think of me. They say I have strung all these things together to avoid being questioned too closely as to the source of my wealth. I would like to see the man who could invent a story that would hold together like this one. Well, they must take it as fiction—there it is.

I have told my story—and now I suppose I have to take up the worries of this terrestrial life again. Even if one has been to the moon, one has still to earn a living. So I am working here at Amalfi on the scenario of that play I sketched before

Cavor came walking into my world, and I am trying to piece my life together as it was before ever I saw him. I must confess that I find it hard to keep my mind on the play when the moonshine comes into my room. It is full moon here, and last night I was out on the pergola for hours staring away at that shining blankness that hides so much. Imagine it! tables and chairs and trestles and bars of gold! Confound it! —if only one could hit on that Cavorite again! But such a thing as that doesn't come twice in a life. Here I am, a little better off than I was at Lympne, and that is all. And Cavor has sought death in a more elaborate way than any human being ever did before. So the story closes as finally and completely as a dream. It fits in so little with all the other things of life, so much of it is so utterly remote from all human experience, the leaping, the queer eating, the hard breathing of those weightless times, that indeed there are moments when, in spite of my moon gold, I do more than half believe myself that the whole thing was a dream.

CHAPTER TWENTY-ONE

THE ASTONISHING COMMUNICATION OF MR. JULIUS WENDIGEE

WHEN I had finished the account of my return to the earth at Littlestone I wrote "The End," made a flourish, and threw my pen aside, fully believing that the whole story of the First Men in the Moon was told. Not only had I done this, but I had placed my manuscript in the hands of a literary agent, had permitted it to be sold, had seen the greater portion of it appear in *The Strand Magazine*, and was setting to work again upon the scenario of the play I had commenced at Lympne before I realised that the end was not yet. Following me from Amalfi to Algiers, there reached me (it is now about six weeks ago) one of the most astounding communications I have ever been fated to receive. Briefly, it informed me that Mr. Julius Wendigee, a Dutch electrician, who has been experimenting with certain apparatus akin to the apparatus used by Mr. Tesla in America, in the hope of discovering some method of communication with Mars, was receiving day by day a curiously fragmentary message in English, which was indisputably emanating from Mr. Cavor in the moon.

At first I thought the thing was an elaborate practical joke by some one who had seen the manuscript of my narrative. I answered Mr. Wendigee jestingly, but he replied in a manner that put such suspicion altogether aside, and in a state of inconceivable excitement I hurried from Algiers to the little observatory upon the Monte Rosa in which he was working. In the presence of his record and his appliances—and above all of the messages from Mr. Cavor that were coming to hand—my lingering doubts vanished. I decided at once to accept his proposal to remain with him, assisting him to take down the record from day to day, and endeavouring with him to send a message back to the moon. Cavor, we learnt, was not only alive but free in the midst of an almost inconceivable community of these ant-like beings, these ant-men, in the blue darkness of the lunar caves. He was lamed, it seemed, but otherwise in quite good health—in better health, he distinctly said, than he usually enjoyed on earth. He had had a fever, but it had left no bad effects. And naturally enough he seemed to be labouring under a conviction that I was either dead in the moon crater or lost in the deep of space.

Mr. Wendigee was engaged in quite a different investigation when he received the first message from the moon. The reader will no doubt recall the little excitement that began the century, arising out of an announcement by Mr. Nikola Tesla, the American electrical celebrity, that he had received

a message from Mars. His announcement recalled attention to a fact that had long been familiar to scientific people, namely: that from some unknown source in space, waves of electro-magnetic disturbance, entirely similar to those used by Signor Marconi for his wireless telegraphy, are constantly reaching the earth. Besides Mr. Tesla several other observers have been engaged in perfecting apparatus for receiving and recording these vibrations, though few would go so far as to consider them actual messages from some extra-terrestrial sender. Among those few however we must certainly count Mr. Wendigee. Ever since 1898 he had devoted himself almost entirely to this subject, and being a man of ample means he had erected an observatory on the flanks of Monte Rosa, in a position adapted in every way for such observations.

My scientific attainments, I must admit, are not great, but so far as they enable me to judge, Mr. Wendigee's contrivances for detecting and recording any disturbances in the electro-magnetic conditions of space are eminently original and ingenious. And by a happy combination of circumstances, they were set up and in operation about two months before Cavor made his first attempt to call up the earth. Consequently we have fragments of his communication even from the beginning. Unhappily, they are only fragments, and the most momentous of all the things that he had to tell humanity, the instructions, that is, for the making of Cavorite, if indeed he ever transmitted them, have throbbed themselves away unrecorded into space. We never succeeded in getting a response back to Cavor. He did not know therefore what we had received or what we had missed; nor indeed did he certainly know that any one on earth was really aware of his efforts to reach us. And the persistence he displayed in sending eighteen long descriptions of lunar affairs—as they would be if we had them complete—shows how much his mind must have turned back towards his native planet since he left it two years ago.

You can imagine how amazed Mr. Wendigee must have been when he discovered his record of electro-magnetic disturbances interlaced by Cavor's straightforward English. Mr. Wendigee knew nothing of our wild journey moonward, and suddenly—this English out of the void!

It is well the reader should understand the conditions under which these messages were sent. Somewhere within the moon Cavor certainly had access for a time to a considerable amount of electrical apparatus, and it would seem he rigged up—perhaps furtively—a transmitting arrangement of the Marconi type. This he was able to operate at irregular intervals: sometimes for only half an hour or so, sometimes for three or four hours at a stretch. At these times he transmitted his earthward message, regardless of the fact that the relative position of the moon and points upon the earth's

surface is constantly altering. As a consequence of this and of the necessary inperfections of our recording instruments his communication comes and goes in our records in an extremely fitful manner; it becomes blurred; it "fades out" in a mysterious and altogether exasperating way. And added to this is the fact that he was not an expert operator; he had partly forgotten, or never completely mastered, the code in general use, and as he became fatigued he dropped words and misspelt in a curious manner.

Altogether we have probably missed quite half of the communications he made, and much we have is damaged, broken, and partly effaced. In the abstract that follows the reader must be prepared therefore for a considerable amount of break, hiatus, and change of topic. Mr. Wendigee and I are collaborating in a complete and annotated edition of the Cavor record, which we hope to publish, together with a detailed account of the instruments employed, beginning with the first volume in January next. That will be the full and scientific report, of which this is only the popular first transcript. But here we give at least sufficient to complete the story I have told, and to give the broad outlines of the state of that kindred world so near, and yet so dissimilar to our own.

CHAPTER TWENTY-TWO

AN ABSTRACT OF THE SIX MESSAGES FIRST RECEIVED FROM MR. CAVOR

THE two earlier messages of Mr. Cavor may very well be reserved for that larger volume. They simply tell with greater brevity and with a difference in several details that is interesting, but not of any vital importance, the bare facts of the making of the sphere and our departure from the world. Throughout, Cavor speaks of me as a man who is dead, but with a curious change of temper as he approaches our landing on the moon. "Poor Bedford," he says of me, and "this poor young man," and he blames himself for inducing a young man, "by no means well equipped for such adventures," to leave a planet "on which he was indisputably fitted to succeed" on so precarious a mission. I think he underrates the part my energy and practical capacity played in bringing about the realisation of his theoretical sphere. "We arrived," he says, with no more account of our passage through space than if we had made a journey in a railway train.

And then he becomes increasingly unfair to me. Unfair, indeed, to an extent I should not have expected in a man trained in the search for truth. Looking back over my previously written account of these things I must insist that I have been altogether juster to Cavor than he has been to me. I have extenuated little and suppressed nothing. But his account is :

"It speedily became apparent that the entire strangeness of our circumstances and surroundings—great loss of weight, attenuated but highly oxygenated air, consequent exaggeration of the results of muscular effort, rapid development of weird plants from obscure spores, lurid sky—was exciting my companion unduly. On the moon his character seemed to deteriorate. He became impulsive, rash, and quarrelsome. In a little while his folly in devouring some gigantic vesicles and his consequent intoxication led to our capture by the Selenites—before we had had the slightest opportunity of properly observing their ways. . . ."

(He says, you observe, nothing of his own concession to these same "vesicles.")

And he goes on from that point to say : "We came to a difficult passage with them, and Bedford, mistaking certain gestures of theirs "—pretty gestures they were !—"gave way to a panic violence. He ran amuck, killed three, and perforce I had to flee with him after the outrage. Subsequently we fought with a number who endeavoured to bar our way, and slew seven or eight more. It says much for the tolerance of

these beings that on my recapture I was not instantly slain. We made our way to the exterior, and to increase our chances of recovering our sphere, separated in the crater of our arrival. But presently I came upon a body of Selenites, led by two who were curiously different, even in form, from any of those we had seen hitherto, with larger heads and smaller bodies and much more elaborately wrapped about. After evading them for some time I fell into a crevasse, cut my head rather badly and displaced my patella, and, finding crawling very painful, decided to surrender—if they would still permit me to do so. This they did, and perceiving my helpless condition carried me with them again into the moon. And of Bedford I have heard or seen nothing more nor, so far as I can gather, has any Selenite. Either the night overtook him in the crater, or else, which is more probable, he found the sphere, and desiring to steal a march upon me made off with it—only, I fear, to find it uncontrollable, and to meet a more lingering fate in outer space."

And with that Cavor dismisses me and goes on to more interesting topics. I dislike the idea of seeming to use my position as his editor to deflect his story in my own interest, but I am obliged to protest here against the turn he gives these occurrences. He says nothing about that gasping message on the blood-stained paper in which he told, or attempted to tell, a very different story. The dignified self-surrender is an altogether new view of the affair that has come to him, I must insist, since he began to feel secure among the lunar people ; and as for the " stealing a march " conception, I am quite willing to let the reader decide between us on what he has before him. I know I am not a model man —I have made no pretence to be. But am I *that* ?

However, that is the sum of my wrongs. From this point I can edit Cavor with an untroubled mind, for he mentions me no more.

It would seem that the Selenites who came upon him carried him to some point in the interior down " a great shaft " by means of what he describes as " a sort of balloon." We gather from the rather confused passage in which he describes this, and from a number of chance allusions and hints in other and subsequent messages, that this " great shaft " is one of an enormous system of artificial shafts that run, each from what is called a lunar " crater " downwards for very nearly a hundred miles towards the central portion of our satellite. These shafts communicate by transverse tunnels, they throw out abysmal caverns and expand into great globular places ; the whole of the moon's substance for a hundred miles inward, indeed, is a mere sponge of rock. " Partly," says Cavor, " this sponginess is natural, but very largely it is due to the enormous industry of the Selenites in the past. The great circular mounds of the excavated rock

and earth that form these great circles about the tunnels are known to earthly astronomers (misled by a false analogy) as volcanoes."

It was down this shaft they took him, in this "sort of balloon" he speaks of, at first into an inky blackness and then into a region of continually increasing phosphorescence. Cavor's despatches show him to be, for a scientific man, curiously regardless of detail, but we gather that this light was due to the streams and cascades of water—"no doubt containing some phosphorescent organism"—that flowed ever more abundantly downward towards the Central Sea. And as he descended, he says: "The Selenites also became luminous." And at last far below him he saw as it were a lake of heatless fire, the waters of the Central Sea, glowing and eddying in strange perturbation, "like luminous blue milk that is about to boil."

"This Lunar Sea," says Cavor, in a later passage, "is not a stagnant ocean; a solar tide sends it in a perpetural flow around the lunar axis, and strange storms and boilings and rushings of its waters occur, and at times cold winds and thunderings that ascend out of it into the busy ways of the great ant-hill above. It is only when the water is in motion that it gives out light; in its rare seasons of calm it is black. Commonly, when one sees it, its waters rise and fall in an oily swell, and flakes and big rafts of shining, bubbly foam drift with the sluggish, faintly-glowing current. The Selenites navigate its cavernous straits and lagoons in little shallow boats of a canoe-like shape; and even before my journey to the galleries about the Grand Lunar, who is Master of the Moon, I was permitted to make a brief excursion on its waters.

"The caverns and passages are naturally very tortuous. A large proportion of these ways are known only to expert pilots among the fishermen, and not infrequently Selenites are lost forever in their labyrinths. In their remoter recesses, I am told, strange creatures lurk, some of them so terrible and dangerous that all the science of the moon has been unable to exterminate them. There is particularly the Rapha, an inextricable mass of clutching tentacles that one hacks to pieces only to multiply; and the Tzee, a darting creature that is never seen, so subtly and suddenly does it slay. . . ."

He gives us a gleam of description.

"I was reminded on this excursion of what I have read of the Mammoth Caves; if only I had a yellow flambeau instead of the pervading blue light, and a solid-looking boatman with an oar instead of a scuttle-faced Selenite working an engine at the back of the canoe, I could have imagined I had suddenly got back to earth. The rocks about us varied, sometimes black, sometimes pale blue and veined, and once they flashed and glittered as though we had come into a mine of sapphires. And below one saw the ghostly phosphorescent fishes flash and

vanish in the hardly less phosphorescent deep. Then presently a long ultramarine vista down the turgid stream of one of the channels of traffic, and a landing-stage, and then perhaps a glimpse up the enormous crowded shaft of one of the vertical ways.

"In one great place heavy with glistening stalactites a number of boats was anchored. We went alongside one of these and watched the long-armed fishing Selenites winding in a net. They were little, hunchbacked insects with very strong arms, short, bandy legs, and crinkled face-masks. As they pulled, the net seemed the heaviest thing I had come upon in the moon; it was loaded with weights—no doubt of gold—and it took a long time to draw, for in those waters the larger and more edible fish lurk deep. The fish in the net came up like a blue moonrise—a blaze of darting, tossing blue.

"Among their catch was a many-tentaculate evil-eyed black thing, ferociously active, whose appearance they greeted with shrieks and twitters, and which they hacked to pieces with quick, nervous movements. All its dissevered limbs continued to lash and writhe in a vicious manner. Afterwards when fever had hold of me I dreamt again and again of that bitter, furious creature rising so vigorous and active out of the unknown sea. It was the most active and malignant thing of all the living creatures I have yet seen in this world inside the moon. . . .

"The surface of this sea must be very nearly two hundred miles (if not more) below the level of the moon's exterior; all the cities of the moon lie, I learned, immediately above this Central Sea, in such cavernous spaces and artificial galleries as I have described, and they communicate with the exterior by enormous vertical shafts which open invariably in what are called by earthly astronomers the 'craters' of the moon. The lid covering one such aperture I had already seen during the wanderings that had preceded my capture.

"Upon the condition of the less central portion of the moon I have not yet arrived at very precise knowledge. There is an enormous system of caverns in which the mooncalves shelter during the night; and there are abattoirs and the like—in one of these it was that Bedford and I fought with the Selenite butchers—and I have seen since balloons laden with meat descending out of the upper dark. I have as yet scarcely learnt as much of these things as a Zulu in London will learn about the British corn supplies in the same time. It is clear, however, that these vertical shafts and the vegetation of the surface must play an essential rôle in ventilating and keeping fresh the atmosphere of the moon. At one time, and particularly on my first emergence from my prison, there was certainly a cold wind blowing *down* the shaft, and later there was a kind of sirocco upwards that corresponded with my fever.

For at the end of about three weeks I fell ill of an indefinable fever, and in spite of sleep and the quinine tabloids that very fortunately I had brought in my pocket, I remained ill and fretting miserably, almost to the time when I was taken into the palace of the Grand Lunar, who is Master of the Moon.

"I will not dilate on the wretchedness of my condition," he remarks, "during those days of ill-health." Nevertheless he goes on with great amplitude with details I omit here. "My temperature," he concludes, "kept abnormally high for a long time, and I lost all desire for food. I had stagnant waking intervals and sleep tormented by dreams, and at one phase I was, I remember, so weak as to be earth-sick and almost hysterical. I longed almost intolerably for colour to break the everlasting blue. . . ."

He reverts again presently to the topic of this sponge-caught lunar atmosphere. I am told by astronomers and physicists that all he tells is in absolute accordance with what was already known of the moon's condition. Had earthly astronomers had the courage and imagination to push home a bold induction, says Mr. Wendigee, they might have foretold almost everything that Cavor has to say of the general structure of the moon. They know now pretty certainly that moon and earth are not so much satellite and primary as smaller and greater sisters, made out of one mass, and consequently made of the same material. And since the density of the moon is only three-fifths that of the earth, there can be nothing for it but that she is hollowed out by a great system of caverns. There was no necessity, said Sir Jabez Flap, F.R.S., that most entertaining exponent of the facetious side of the stars, that we should ever have gone to the moon to find out such easy inferences, and points the pun with an allusion to Gruyère; but he certainly might have announced his knowledge of the hollowness of the moon before. And if the moon is hollow, then the apparent absence of air and water is, of course, quite easily explained. The sea lies within at the bottom of the caverns, and the air travels through the great sponge of galleries, in accordance with simple physical laws. The caverns of the moon, on the whole, are very windy places. As the sunlight comes round the moon, the air in the outer galleries on that side is heated, its pressure increases, some flows out on the exterior and mingles with the evaporating air of the craters (where the plants remove its carbonic acid), while the greater portion flows round through the galleries to replace the shrinking air of the cooling side that the sunlight had left. There is, therefore, a constant eastward breeze in the air of the outer galleries, and an up-flow during the lunar day up the shafts, complicated, of course, very greatly by the varying shape of the galleries and the ingenious contrivances of the Selenite mind. . . .

CHAPTER TWENTY-THREE

THE NATURAL HISTORY OF THE SELENITES

THE messages of Cavor from the sixth up to the sixteenth are for the most part so much broken, and so abounding in repetitions, that they scarcely form a consecutive narrative. They will be given in full, of course, in the scientific report, but here it will be far more convenient to continue simply to abstract and quote as in the former chapter. We have subjected every word to a keen critical scrutiny, and my own brief memories and impressions of lunar things have been of inestimable help in interpreting what would otherwise have been impenetrably dark. And, naturally, as living beings, our interest centres far more upon the strange community of lunar insects in which he is living, it would seem as an honoured guest, than upon the mere physical condition of their world.

I have already made it clear, I think, that the Selenites I saw resembled man in maintaining the erect attitude and in having four limbs, and I have compared the general appearance of their heads and the jointing of their limbs to that of insects. I have mentioned too the peculiar consequence of the smaller gravitation of the moon on their fragile slightness. Cavor confirms me upon all these points. He calls them "animals," though of course they fall under no division of the classification of earthly creatures, and he points out "the insect type of anatomy had, fortunately, for men, never exceeded a relatively very small size on earth." The largest terrestrial insects, living or extinct, do not as a matter of fact measure six inches in length; "but here, against the lesser gravitation of the moon, a creature certainly as much insect as vertebrate seems to have been able to attain to human and ultra-human dimensions."

He does not mention the ant, but throughout his allusions the ant is continually brought before my mind, in its sleepless activity, its intelligence, its social organisation and, more particularly, the fact that it displays, in addition to the two forms, the male and the female, produced by almost all other animals, a great variety of sexless creatures, workers, soldiers and the like, differing from one another in structure, character, power and use and yet all members of the same species. And these Selenites are of course, if only by reason of this widely extended adaptation, incomparably greater than ants. And in place of the existing four or five different forms of ant there are almost innumerably different forms of Selenite. I have endeavoured to indicate the very considerable difference observable in such Selenites of the outer crust as I happened to encounter; the differences in size, hue and shape were

certainly as wide as the differences between the most widely-separated races of men. But such differences as I saw fade absolutely to nothing in comparison with the huge distinctions of which Cavor tells. It would seem the exterior Selenites I saw were, indeed, mostly of one colour and occupation—mooncalf hinds, butchers, fleshers, and the like. But within the moon, practically unsuspected by me, there are, it seems, a host of variations. The moon is indeed a kind of super-ant-hill. But in place of the five distinctive types, the worker, soldier, winged male, queen and slave of the ant-world, there are amongst the moon-folk not only hundreds of differentiations, but, within each, and linking one to the other, a whole series of fine gradations. And these Selenites are not merely colossally superior to ants, but, according to Cavor, colossally, in intelligence, morality and social wisdom, higher than man.

It would seem the discovery came upon Cavor very speedily. I infer rather than learn from his narrative that he was captured by the mooncalf hinds under the direction of those other Selenites who "have larger brain-cases (heads?) and very much shorter legs." Finding he would not walk even under the goad, they carried him into darkness, crossed a narrow, plank-like bridge that may have been the very bridge I had refused, and put him down in something that must have seemed at first to be some sort of lift. This was the balloon—it had certainly been absolutely invisible to us in the darkness—and what had seemed to me a mere plank-walking into the void was really, no doubt, the passage of the gangway. In this he descended towards constantly more luminous strata of the moon. At first they descended in silence—save for the twitterings of the Selenites—and then into a stir of windy movement. In a little while the profound blackness had made his eyes so sensitive that he began to see more and more of the things about him, and at last the vague took shape.

"Conceive an enormous cylindrical space," says Cavor in his seventh message, "a quarter of a mile across, perhaps; very dimly lit at first and then bright, with big platforms twisting down its sides in a spiral that vanishes at last below in a blue profundity; and lit ever more brightly—one could not tell how or why. Think of the well of the very largest spiral staircase or lift-shaft that you have ever looked down, and magnify that by a hundred. Imagine it at twilight seen through blue glass. Imagine yourself looking down that; only imagine also that you feel extraordinarily light and have got rid of any giddy feeling you might have on earth, and you will have the first conditions of my impression. Round this enormous shaft imagine a broad gallery running in a much steeper spiral than would be credible on earth, and forming a steep road protected from the gulf only by a little parapet that vanishes at last in perspective a couple of miles below.

"Looking up, I saw the very fellow of the downward vision

it had of course the effect of looking into a very steep cone. A wind was blowing down the shaft, and far above I fancy I heard, growing fainter and fainter, the bellowing of the moon-calves that were being driven down again from their evening pasturage on the exterior. And up and down the spiral galleries were scattered numerous moon people, pallid, faintly self-luminous insects, regarding our appearance or busied on unknown errands.

"Either I fancied it or a flake of snow came drifting swiftly down on the icy breeze. And then, falling like a snowflake, a little figure, a little man-insect clinging to a parachute, drove down very swiftly towards the central places of the moon.

"The big-headed Selenite sitting beside me, seeing me move my head with the gesture of one who saw, pointed with his trunk-like 'hand' and indicated a sort of jetty coming into sight very far below: a little landing-stage, as it were, hanging into the void. As it swept up towards us our pace diminished very rapidly, and in a few moments as it seemed we were abreast of it and at rest. A mooring-place was flung and grasped, and I found myself pulled down to a level with a great crowd of Selenites, who jostled to see me.

"It was an incredible crowd. Suddenly and violently there was forced upon my attention the vast amount of difference there is amongst these beings of the moon.

"Indeed, there seemed not two alike in all that jostling multitude. They differed in shape, they differed in size! Some bulged and overhung, some ran about among the feet of their fellows, some twined and interlaced like snakes. All of them had the grotesque and disquieting suggestion of an insect that has somehow contrived to burlesque humanity; all seemed to present an incredible exaggeration of some particular feature; one had a vast right forelimb, an enormous antennal arm, as it were; one seemed all leg, poised, as it were, on stilts; another protruded an enormous nose-like organ beside a sharply speculative eye that made him startlingly human until one saw his expressionless mouth. One has seen punchinellos made of lobster claws—he was like that. The strange and (except for the want of mandibles and palps) most insect-like head of the mooncalf-minders underwent astounding transformations; here it was broad and low, here high and narrow, here its vacuous brow was drawn out into horns and strange features, here it was whiskered and divided, and there with a grotesquely human profile. There were several brain-cases distended like bladders to a huge size. The eyes, too, were strangley varied, some quite elephantine in small their alertness, some huge pits of darkness. There were amazing forms with heads reduced to microscopic proportions and blobby bodies; and fantastic, flimsy things that existed it would seem only as a basis for vast, white-rimmed, glaring

eyes. And oddest of all, two or three of these weird inhabitants of a subterranean world, a world sheltered by innumerable miles of rock from sun or rain, *carried umbrellas* in their tentaculate hands !—real terrestrial-looking umbrellas ! And then I thought of the parachutist.

" These moon people behaved exactly as a human crowd might have done in similar circumstances : they jostled and thrust one another, they shoved one another aside, they even clambered upon one another to get a glimpse of me. Every moment they increased in numbers, and pressed more urgently upon the discs of my ushers "—Cavor does not explain what he means by this—" every moment fresh shapes forced themselves upon my astounded attention. And presently I was signed and helped into a sort of litter, and lifted up on the shoulders of strong-armed bearers and so borne over this seething nightmare towards the apartments that were provided for me in the moon. All about me were eyes, faces, masks, tentacles, a leathery noise like the rustling of beetle wings, and a great bleating and twittering of Selenite voices."

We gather he was taken to a " hexagonal apartment," and there for a space he was confined. Afterwards he was given a much more considerable liberty ; indeed, almost as much freedom as one has in a civilised town on earth. And it would appear that the mysterious being who is the ruler and master of the moon appointed two Selenites " with large heads " to guard and study him, and to establish whatever mental communications were possible with him. Amazing and incredible as it may seem, these two creatures, these fantastic men-insects, these beings of another world, were presently communicating with Cavor by means of terrestrial speech.

Cavor speaks of them as Phi-oo and Tsi-puff. Phi-oo, he says, was about five feet high ; he had small, slender legs about eighteen inches long, and slight feet of the common lunar pattern. On these balanced a little body, throbbing with the pulsations of his heart. He had long, soft, many-jointed arms ending in a tentacled grip, and his neck was many-jointed in the usual way, but exceptionally short and thick. " His head," says Cavor—apparently alluding to some previous description that has gone astray in space—" is of the common lunar type, but strangely modified. The mouth has the usual expressionless gape, but it is unusually small and pointing downwards, and the mask is reduced to the size of a large flat nose-flap. On either side are the little hen-like eyes. The rest of the head is distended into a huge globe, and the chitinous leathery cuticle of the mooncalf hinds thins out to a mere membrane, through which the pulsating brain movements are distinctly visible. He is a creature, indeed, with a tremendously hypertrophied brain, and with the rest of his organism both relatively and absolutely dwarfed." In another passage Cavor compares the back view of him to

Atlas supporting the world. Tsi-puff, it seems, was a similar insect, but his "face" was drawn out to a considerable length, and the brain hypertrophy being in different regions, his head was not round but pear-shaped, with the stalk downward. There were also in Cavor's retinue litter-carriers, lop-sided beings with enormous shoulders, very spidery ushers, and a squat foot-attendant.

The manner in which Phi-oo and Tsi-puff attacked the problem of speech was fairly obvious. They came into this "hexagonal cell" in which Cavor was confined, and began imitating every sound he made, beginning with a cough. He seems to have grasped their intention with great quickness, and to have begun repeating words to them and pointing to indicate the application. The procedure was probably always the same. Phi-oo would attend to Cavor for a space, then point also and say the word he had heard. The first word he mastered was "man," and the second "mooney"—which Cavor on the spur of the moment seems to have used instead of "Selenite" for the moon race. As soon as Phi-oo was assured of the meaning of a word he repeated it to Tsi-puff, who remembered it infallibly. They mastered over one hundred English nouns at their first session.

Subsequently it seems they brought an artist with them to assist the work of explanation with sketches and diagrams—Cavor's drawings being rather crude. "He was," says Cavor, "a being with an active arm and an arresting eye," and he seemed to draw with incredible swiftness.

The eleventh message is undoubtedly only a fragment of a longer communication. After some broken sentences, the record of which is unintelligible, it goes on:

"But it will interest only linguists, and delay me too long, to give the details of the series of intent parleys of which these were the beginning, and, indeed, I very much doubt if I could give in anything like the proper order all the twistings and turnings that we made in our pursuit of mutual comprehension. Verbs were soon plain sailing—at least, such active verbs as I could express by drawings; some adjectives were easy, but when it came to abstract nouns, to prepositions, and the sort of hackneyed figures of speech by means of which so much is expressed on earth, it was like diving in cork jackets. Indeed, these difficulties were insurmountable until to the sixth lesson came a fourth assistant, a being with a huge, football-shaped head, whose *forte* was clearly the pursuit of intricate analogy. He entered in a preoccupied manner, stumbling against a stool, and the difficulties that arose had to be presented to him with a certain amount of clamour and hitting and pricking before they reached his apprehension. But once he was involved his penetration was amazing. Whenever there came a need of thinking beyond Phi-oo's by no means limited scope, this prolate-headed person was in request, but he

invariably told the conclusion to Tsi-puff, in order that it might be remembered ; Tsi-puff was ever the arsenal for facts. And so we advanced again.

" It seemed long and yet brief—a matter of days before I was positively talking with these insects of the moon. Of course, at first it was an intercourse infinitely tedious and exasperating, but imperceptibly it has grown to comprehension. And my patience has grown to meet its limitations. Phi-oo it is who does all the talking. He does it with a vast amount of meditative provisional 'M'm—M'm,' and he has caught up one or two phrases, 'If I may say,' 'If you understand,' and adorns all his speech with them.

" Thus he would discourse. Imagine him explaining his artist.

" 'M'm—M'm—he—if I may say—draw. Eat little—drink little—draw. Love draw. No other thing. Hate all who not draw like him. Angry. Hate all who draw like him better. Hate most people. Hate all who not think all world for to draw. Angry. M'm. All things mean nothing to him—only draw. He like you . . . if you understand. . . . New thing to draw. Ugly—striking. Eh ? "

" 'He '—turning to Tsi-puff—'love remember words. Remember wonderful more than any. Think no, draw no—remember. Say '—here he referred to his gifted assistant for a word—'histories—all things. He hear once—say ever.'

" It is more wonderful to me than the most wonderful dream to hear these extraordinary creatures—for even familiarity fails to weaken the inhuman effect of their appearance—continually piping a nearer approach to coherent earthly speech, asking questions, giving answers. I feel that I am casting back to the fable-hearing period of childhood again when the ant and the grasshopper talked together and the bee judged between them. . . ."

And while these linguistic exercises were going on Cavor seems to have experienced a considerable relaxation of his confinement. The first dread and distrust our unfortunate conflict aroused was being, he says, " continually effaced by the deliberate rationality of all I do. . . . I am now able to come and go as I please, or I am restricted only for my own good. So it is I have been able to get at this apparatus, and, assisted by a happy find among the material that is littered in this enormous store-cave, I have contrived to despatch these messages. So far not the slightest attempt has been made to interfere with me in this, though I have made it quite clear to Phi-oo that I am signalling to the earth.

" 'You talk to other ? ' he asked, watching me.

" 'Others,' said I.

" 'Others,' he said. 'Oh, yes. Men ? '

" And I went on transmitting."

Cavor was continually making corrections in his previous accounts of the Selenites, as fresh facts flowed in upon him to modify his conclusions, and accordingly one gives the quotations that follow with a certain amount of reservation. They are quoted from the ninth, thirteenth and sixteenth messages, and, altogether vague and fragmentary as they are, they probably give as complete a picture of the social life of this strange community as mankind can now hope to have for some generations.

"In the moon," says Cavor, "every citizen knows his place. He is born to that place, and the elaborate discipline of training and education and surgery he undergoes fits him at last so completely to it that he has neither ideas nor organs for any purpose beyond it. 'Why should he?' Phi-oo would ask. If, for example, a Selenite is destined to be a mathematician, his teachers and trainers set out at once to that end. They check any incipient disposition to other pursuits, they encourage his mathematical bias with a perfect psychological skill. His brain grows, or at least the mathematical faculties of his brain grow, and the rest of him only so much as is necessary to sustain this essential part of him. At last, save for rest and food, his one delight lies in the exercise and display of his faculty, his one interest in its application, his sole society the other specialists in his own line. His brain grows continually larger, at least so far as the portions engaging in mathematics are concerned; they bulge ever larger and seem to suck all life and vigour from the rest of his frame. His limbs shrivel, his heart and digestive organs diminish, his insect face is hidden under its bulging contours. His voice becomes a mere squeak for the stating of formulæ; he seems deaf to all but properly enunciated problems. The faculty of laughter, save for the sudden discovery of some paradox, is lost to him; his deepest emotion is the evolution of a novel computation. And so he attains his end.

"Or again, a Selenite appointed to be a minder of mooncalves is from his earliest years induced to think and live mooncalf, to find his pleasure in mooncalf lore, his exercise in their tending and pursuit. He is trained to become wiry and active, his eye is indurated to the tight wrappings, the angular contours that constitute a 'smart mooncalfishness.' He takes at last no interest in the deeper part of the moon; he regards all Selenites not equally versed in mooncalves with indifference, derision, or hostility. His thoughts are of mooncalf pastures, and his dialect an accomplished mooncalf technique. So also he loves his work, and discharges in perfect happiness the duty that justifies his being. And so it is with all sorts and conditions of Selenites—each is a perfect unit in a world machine. . . .

"These beings with big heads to whom the intellectual labours fall, form a sort of aristocracy in this strange society,

and at the head of them, quintessential of the moon, is that marvellous gigantic ganglion the Grand Lunar, into whose presence I am finally to come. The unlimited development of the minds of the intellectual class is rendered possible by the absence in the lunar anatomy of bony skull, that strange box of bone that clamps about the developing brain of man, imperiously insisting 'thus far and no farther' to all his possibilities. They fall into three main classes differing greatly in influence and respect. These are the administrators, of whom Phi-oo was one, Selenites of considerable initiative and versatility, responsible each for a certain cubic content of the moon's bulk; the experts, like the football-headed thinkers who are trained to perform certain special operations; and the erudite, who are repositories of all knowledge. To this latter class belongs Tsi-puff, the first lunar professor of terrestrial languages. With regard to these latter it is a curious little thing to note that the unlimited growth of the lunar brain has rendered unnecessary the invention of all those mechanical aids to brain work which have distinguished the career of man. There are no books, no records of any sort, no libraries, nor inscriptions. All knowledge is stored in distended brains much as the honey-ants of Texas store honey in their distended abdomens. The lunar Somerset House and the lunar British Museum Library are collections of living brains. . . .

"The less specialised administrators, I note, do for the most part take a very lively interest in me whenever they encounter me. They will come out of their way and stare at me and ask questions to which Phi-oo will reply. I see them going hither and thither with a retinue of bearers, attendants, shouters, parachute-carriers, and so forth—queer groups to see. The experts for the most part ignore me completely, even as they ignore each other, or notice me only to begin a clamorous exhibition of their distinctive skill. The erudite with very few exceptions are rapt in an impervious and apoplectic complacency from which only a denial of their erudition can rouse them. Usually they are led about by little watchers and attendants, and often there are small and active-looking creatures, small females usually, that I am inclined to think are a sort of wife to them; but some of the profounder scholars are altogether too great for locomotion, and are carried from place to place in a kind of sedan tub, wabbling jellies of knowledge that enlist my respectful astonishment. I have just passed one in coming to this place where I am permitted to amuse myself with these electrical toys, a vast, shaven, shaky head, bald and thin-skinned, carried on his grotesque stretcher. In front and behind came his bearers, and curious, almost trumpet-faced, news disseminators shrieked his fame.

"I have already mentioned the retinues that accompanied most of the intellectuals: ushers, bearers, valets, extraneous tentacles and muscles as it were, to replace the abortive

physical powers of these hypertrophied minds. Porters almost invariably accompany them. There are also extremely swift messengers with spider-like legs, and 'hands' for grasping parachutes, and attendants with vocal organs that could wellnigh wake the dead. Apart from their controlling intelligence, these subordinates are as inert and helpless as umbrellas in a stand. They exist only in relation to the orders they have to obey, the duties they have to perform.

"The bulk of these insects, however, who go to and fro upon the spiral ways, who fill the ascending balloons and drop past me clinging to flimsy parachutes, are, I gather, of the operative class. 'Machine hands' indeed some of these are in actual fact—it is no figure of speech; the single tentacle of the mooncalf hind is replaced by huge single or paired bunches of three, or five, or seven digits for clawing, lifting, guiding, the rest of them no more than subordinate appendages to these important parts. Some, who I suppose deal with bell-striking mechanism, have enormous rabbit-like ears just behind the eyes; some whose work lies in delicate chemical operations project a vast olfactory organ; others again have flat feet for treadles with anchylosed joints; and others—who I have been told are glass-blowers—seem mere lung-bellows. But every one of these common Selenites is exquisitely adapted to the social need it meets. Fine work is done by fined-down workers amazingly dwarfed and neat. Some I could hold on the palm of my hand. There is even a sort of turnspit Selenite, very common, whose duty and only delight it is to supply the motive power for various small appliances. And to rule over these things and order any erring tendency there might be in some aberrant natures are the finest musuclar beings I have seen in the moon, a sort of lunar police, who must have been trained from their earliest years to give a perfect respect and obedience to the swollen heads.

"The making of these various sorts of operative must be a very curious and interesting process. I am still much in the dark about it, but quite recently I came upon a number of young Selenites, confined in jars from which only the fore limbs protruded, who were being compressed to become machine-minders of a special sort. The extended 'hand' in this highly developed system of technical education is stimulated by irritants and nourished by injection while the rest of the body is starved. Phi-oo, unless I misunderstood him, explained that in the earlier stages these queer little creatures are apt to display signs of suffering in their various cramped situations, but they easily become indurated to their lot; and he took me on to where a number of flexible-limbed messengers were being drawn out and broken in. It is quite unreasonable, I know, but these glimpses of the educational methods of these beings have affected me disagreeably. I hope, however, that

may pass off and I may be able to see more of this aspect of this wonderful social order. That wretched-looking hand sticking out of its jar seemed to appeal for lost possibilities ; it haunts me still, although, of course, it is really in the end a far more humane proceeding than our earthly method of leaving children to grow into human beings, and then making machines of them.

"Quite recently, too—I think it was on the eleventh or twelfth visit I made to this apparatus—I had a curious light upon the lives of these operatives. I was being guided through a short cut hither instead of going down the spiral and by the quays of the Central Sea. From the devious windings of a long, dark gallery we emerged into a vast, low cavern, pervaded by an earthy smell and rather brightly lit. The light came from a tumultuous growth of livid fungoid shapes—some indeed singularly like our terrestrial mushrooms, but standing as high or higher than a man.

"'Mooneys eat these ?' said I to Phi-oo.

"'Yes, food.'

"'Goodness me !' I cried, 'what's that ?'

"My eye had just caught the figure of an exceptionally big and ungainly Selenite lying motionless among the stems, face downwards. We stopped.

"'Dead ?' I asked. For as yet I have seen no dead in the moon, and I have grown curious.

"'*No !*' exclaimed Phi-oo. 'Him—worker—no work to do. Get little drink then—make sleep—till we him want. What good him wake, eh ? No want him walking about.'

"'There's another !' cried I.

"And indeed all that huge extent of mushroom ground was, I found, peppered with these prostrate figures sleeping under an opiate until the moon had need of them. There were scores of them of all sorts, and we were able to turn some of them over, and examine them more precisely than I had been able to do previously. When disturbed they breathed noisily, but did not wake. One I remember very distinctly ; he left a strong impression, I think, because some trick of the light and of his attitude was strongly suggestive of a drawn-up human figure. His forelimbs were long, delicate tentacles—he was some kind of refined manipulator—and the pose of his slumber suggested a submissive suffering. No doubt it was quite a mistake for me to interpret his expression in that way, but I did. And as Phi-oo rolled him over into the darkness among the livid fleshiness again, I felt a distinctly unpleasant sensation, although as he rolled the insect in him was confessed.

"It simply illustrates the unthinking way in which one acquires habits of thought and feeling. To drug the worker one does not want and toss him aside is surely far better than to expel him from his factory to wander starving in the

streets. In every complicated social community there is necessarily a certain intermittency in the occupation of all specialised labour, and in this way the trouble of an unemployed problem is altogether anticipated. And yet, so unreasonable are even scientifically trained minds, I still do not like the memory of those prostrate forms amidst those quiet, luminous arcades of fleshy growth, and I avoid that short cut in spite of the inconveniences of its longer, more noisy, and more crowded alternative.

"My alternative route takes me round by a huge, shadowy cavern, very crowded and clamorous, and here it is I see peering out of the hexagonal openings of a sort of honeycomb wall, or parading a large open space behind, or selecting the toys and amulets made to please them by the acephalic dainty-fingered jewellers who work in kennels below, the mothers of the moon-world—the queen bees, as it were, of the hive. They are noble-looking beings, fantastically and sometimes quite beautifully adorned, with a proud carriage and, save for their mouths, almost microscopic heads. . . .

"Of the condition of the moon sexes, marrying and giving in marriage, and of birth and so forth among the Selenites, I have as yet been able to learn very little. With the steady progress of Phi-oo in English, however, my ignorance will no doubt as steadily disappear. I am of opinion that, as with the ants and bees, there is in this community a large majority of the members of the neuter sex. Of course on earth in our cities there are now many who never live that life of parentage which is the natural life of man. Here, as with the ants, this thing has become a normal condition of the race; and the whole of such replacement as is necessary falls upon this special and by no means numerous class of matrons, the mothers of the moon-world, large and stately beings beautifully fitted to bear the larval Selenite. Unless I misunderstand an explanation of Phi-oo's, they are absolutely incapable of cherishing the young they bring into the moon; periods of foolish indulgence alternate with moods of aggressive violence; and as soon as possible the little creatures, who are quite soft and flabby and pale coloured, are transferred to the charge of a variety of celibate females, women 'workers,' as it were, who in some cases possess brains of almost masculine dimensions."

Just at this point, unhappily, this message broke off. Fragmentary and tantalising as the matter constituting this chapter is, it does nevertheless give a vague, broad impression of an altogether strange and wonderful world—a world with which our own must now prepare to reckon sooner or later. This intermittent trickle of messages, this whispering of a record needle in the darkness of the mountain slopes, is the first warning of such a change in human conditions as man-

kind has scarcely imagined heretofore. In that planet there are new elements, new appliances, new traditions, an overwhelming avalanche of new ideas, a strange race with whom we must inevitably struggle for mastery—gold as common as iron or wood. . . .

CHAPTER TWENTY-FOUR

THE GRAND LUNAR

THE penultimate message describes, occasionally even with elaborate detail, the encounter between Cavor and the Grand Lunar, who is the ruler or master of the moon. Cavor seems to have sent most of it without interference, but to have been interrupted in the concluding portion. The second came after an interval of a week.

The first message begins: "At last I am able to resume this ——"; it then becomes illegible for a space, and after a time resumes in mid-sentence.

The missing words of the following sentence are probably "The crowd." There follows quite clearly: "grew even denser as we drew near the palace of the Grand Lunar—if I may call a series of excavations a palace. Everywhere faces stared at me—blank, chitinous gapes and masks, big eyes peering over tremendous nose tentacles, and little eyes beneath monstrous forehead plates; below, an undergrowth of smaller creatures dodged and yelped; and grotesque heads poised on sinuous, swanlike, long-jointed necks appeared craning over shoulders and beneath armpits. Keeping a welcome space about me marched a cordon of stolid, scuttle-headed guards who had joined us on our leaving the boat in which we had come along the channels of the Central Sea. The flea-like artist with the little brain joined us also, and a thick bunch of lean porter-ants swayed and struggled under the multitude of conveniences that were considered essential to my state. I was carried in a litter during the final stage of our journey. It was made of some very ductile metal that looked dark to me, meshed and woven and with bars of paler metal, and about me as I advanced there grouped itself a long and complicated procession.

"In front, after the manner of heralds, marched four trumpet-faced creatures making a devastating bray; and then came squat, almost beetle-like ushers before and behind, and on either hand a galaxy of learned heads, a sort of animated encyclopædia, who were, Phi-oo explained, to stand about the Grand Lunar for purposes of reference. Not a thing in lunar science, not a point of view or method of thinking, that these wonderful beings did not carry in their heads. Followed guards and porters, and then Phi-oo's shivering brain borne also on a litter. Then came Tsi-puff in a slightly less important litter; then myself on a litter of greater elegance than any other and surrounded by my food and drink attendants. More trumpeters came next, splitting the ear with vehement outcries, and then several big brains, special correspondents one might well call them or historio-

graphers, charged with the task of observing and remembering every detail of this epoch-making interview. A company of attendants, bearing and dragging banners and masses of scented fungi and curious symbols, completed the procession. The way was lined by ushers and officers in caparisons that gleamed like steel, and beyond their line the heads and tentacles of that enormous crowd surged on either hand.

"I will own that I am still by no means indurated to the peculiar effect of the Selenite appearance, and to find myself as it were adrift on this broad sea of excited entomology was by no means agreeable. Just for a space I had something like the 'horrors.' It had come to me before in these lunar caverns, when on occasion I have found myself weaponless and with an undefended back amidst a crowd of these Selenites, but never quite so vividly. It is, of course, as absolutely irrational a feeling as one could well have, and I hope gradually to subdue it. But just for a moment, as I swept forward into the welter of the vast crowd, it was only by gripping my litter tightly and summoning all my will-power that I succeeded in stifling an outcry or some such manifestation. It lasted perhaps three minutes; then I had myself in hand again.

"We ascended the spiral of a vertical way for some time and then passed through a series of huge halls, dome-roofed, and gloriously decorated. The approach to the Grand Lunar was certainly contrived to give one a vivid impression of his greatness. The halls—all happily sufficiently luminous for my terrestrial eye—were a cunning and elaborate crescendo of space and decoration. The effect of their progressive size was enhanced by the steady diminution in the lighting, and by a thin haze of incense that thickened as one advanced. In the earlier ones the vivid, clear light made everything finite and concrete to me. I seemed to advance continually to something larger, dimmer, and less material.

"I must confess that all this splendour made me feel extremely shabby and unworthy. I was unshaven and unkempt; I had brought no razor; I had a coarse beard over my mouth. On earth I have always been inclined to despise any attention to my person beyond a proper care for cleanliness; but under the exceptional circumstances in which I found myself, representing, as I did, my planet and my kind, and depending very largely upon the attractiveness of my appearance for a proper reception, I would have given much for something a little more artistic and dignified than the husks I wore. I had been so serene in the belief that the moon was uninhabited as to overlook such precautions altogether. As it was I was dressed in a flannel jacket, knickerbockers, and golfing stockings, stained with every sort of dirt the moon offered; slippers (of which the left heel was wanting), and a blanket, through a hole in which I thrust

my head. (These clothes, indeed, I still wear.) Sharp bristles are anything but an improvement to my cast of features, and there was an unmended tear at the knee of my knickerbocker that showed conspicuously as I squatted in my litter ; my right stocking, too, persisted in getting about my ankle. I am fully alive to the injustice my appearance did humanity, and if by any expedient I could have improvised something a little out of the way and imposing I would have done so. But I could hit upon nothing. I did what I could with my blanket—folding it somewhat after the fashion of a toga, and for the rest I sat as upright as the swaying of my litter permitted.

" Imagine the largest hall you have ever been in, elaborately decorated with blue and whitish-blue majolica, lit by blue light, you know not how, and surging with metallic or livid-white creatures of such a mad diversity as I have hinted. Imagine this hall to end in an open archway beyond which is a still larger hall, and beyond this yet another and still larger one, and so on. At the end of the vista a flight of steps, like the steps of Ara Cœli at Rome, ascends out of sight. Higher and higher these steps appear to go as one draws nearer their base. But at last I came under a huge archway and beheld the summit of these steps, and upon it the Grand Lunar exalted on his throne.

" He was seated in a blaze of incandescent blue. A hazy atmosphere filled the place so that its walls seemed invisibly remote. This gave him an effect of floating in a blue-black void. He seemed at first a small, self-luminous cloud brooding on his glaucous throne ; his brain-case must have measured many yards in diameter. For some reason that I cannot fathom, a number of blue search-lights coming from behind the throne gave a star-like radiance to the halo immediately surrounding him. About him, and little and indistinct in this glow, a number of body-servants sustained and supported him, and overshadowed and standing in a huge semicircle beneath him were his intellectual subordinates, his remembrancers and computators and searchers, his flatterers and servants, and all the distinguished insects of the court of the moon. Still lower stood ushers and messengers, and then all down the countless steps of the throne were guards, and at the base, enormous, various, indistinct, a vast swaying multitude of the minor dignitaries of the moon. Their feet made a perpetual scraping whisper on the rocky floor, their limbs moved with a rustling murmur.

" As I entered the penultimate hall the music rose and expanded into an imperial magnificence of sound, and the shrieks of the news-bearers died away. . . .

" I entered the last and greatest hall. . . .

" My procession opened out like a fan. My ushers and guards went right and left, and the three litters bearing

myself and Phi-oo and Tsi-puff marched across a shiny waste of floor to the foot of the giant stairs. Then began a vast throbbing hum that mingled with the music. The two Selenites dismounted, but I was bidden remain seated—I imagine as a special honour. The music ceased, but not that humming, and by a simultaneous movement of ten thousand respectful eyes, my attention was directed to the enhaloed supreme intelligence that hovered above us.

"At first as I peered into the radiating blaze, this quintessential brain looked very much like a thin featureless bladder with dim, undulating ghosts of convolutions writhing visibly within. Then beneath its enormity and just above the edge of the throne one saw with a start minute elfin eyes peering out of the blaze. No face, but eyes, as if they peered through holes. At first I could see no more than these two staring little eyes, and then below I distinguished the little dwarfed body and its insect-jointed limbs, shrivelled and white. The eyes stared down at me with a strange intensity, and the lower part of the swollen globe was wrinkled. Ineffectual-looking little hand-tentacles steadied this shape on the throne. . . .

"It was great. It was pitiful. One forgot the hall and the crowd.

"I ascended the staircase by jerks. It seemed to me that the purple glowing brain-case above us spread over me, and took more and more of the whole effect into itself as I drew nearer. The tiers of attendants and helpers grouped about their master seemed to dwindle and fade into the glare. I saw that the shadowy attendants were busy spraying that great brain with a cooling spray, and patting and sustaining it. For my own part I sat gripping my swaying litter and staring at the Grand Lunar, unable to turn my gaze aside. And, at last, as I reached a little landing that was separated only by ten steps or so from the supreme seat, the woven splendour of the music reached a climax and ceased, and I was left naked, as it were, in that vastness, beneath the still scrutiny of the Grand Lunar's eyes.

"He was scrutinising the first man he had ever seen. . . .

"My eyes dropped at last from his greatness to the faint figures in the blue mist about him, and then down the steps to the massed Selenites, still and expectant in their thousands, packed on the floor below. Once again an unreasonable horror reached out towards me . . . and passed.

"After the pause came the salutation. I was assisted from my litter, and stood awkwardly while a number of curious and no doubt deeply symbolical gestures were vicariously performed for me by two slender officials. The encyclopædic galaxy of the learned that had accompanied me to the entrance of the last hall appeared two steps above me and left and right of me, in readiness for the Grand Lunar's

need, and Phi-oo's white brain placed itself about half-way up to the throne in such a position as to communicate easily between us without turning his back on either the Grand Lunar or myself. Tsi-puff took up a position behind him. Dexterous ushers sidled sidewise towards me, keeping a full face to the Presence. I seated myself Turkish fashion, and Phi-oo and Tsi-puff also knelt down above me. There came a pause. The eyes of the nearer court went from me to the Grand Lunar and came back to me, and a hissing and piping of expectation passed across the hidden multitudes below and ceased.

"That humming ceased.

"For the first and last time in my experience the moon was silent.

"I became aware of a faint wheezy noise. The Grand Lunar was addressing me. It was like the rubbing of a finger upon a pane of glass.

"I watched him attentively for a time and then glanced at the alert Phi-oo. I felt amidst those filmy beings ridiculously thick and fleshy and solid ; my head all jaw and black hair. My eyes went back to the Grand Lunar. He had ceased ; his attendants were busy, and his shining superficies was glistening and running with cooling spray.

"Phi-oo meditated through an interval. He consulted Tsi-puff. Then he began piping his recognisable English—at first a little nervously, so that he was not very clear.

"'M'm—the Grand Lunar—wished to say—wishes to say —he gathers you are—m'm—men—that you are a man from the planet earth. He wishes to say that he welcomes you—welcomes you—and wishes to learn—learn, if I may use the word—the state of your world, and the reason why you came to this.'

"He paused. I was about to reply when he resumed. He proceeded to remarks of which the drift was not very clear, though I am inclined to think they were intended to be complimentary. He told me that the earth was to the moon what the sun is to the earth, and that the Selenites desired very greatly to learn about the earth and men. He then told me, no doubt in compliment also, the relative magnitude and diameter of earth and moon, and the perpetual wonder and speculation with which the Selenites had regarded our planet. I meditated with downcast eyes and decided to reply that men too had wondered what might lie in the moon, and had judged it dead, little recking on such magnificence as I had seen that day. The Grand Lunar, in token of recognition, caused his blue search-light to rotate in a very confusing manner, and all about the great hall ran the pipings and whisperings and rustlings of the report of what I had said. He then proceeded to put to Phi-oo a number of inquiries which were easier to answer.

"He understood, he explained, that we lived on the surface of the earth, that our air and sea were outside the globe; the latter part, indeed, he already knew from his astronomical specialists. He was very anxious to have more detailed information of what he called this extraordinary state of affairs, for from the solidity of the earth there had always been a disposition to regard it as uninhabitable. He endeavoured first to ascertain the extremes of temperature to which we earth beings were exposed, and he was deeply interested by my descriptive treatment of clouds and rain. His imagination was assisted by the fact that the lunar atmosphere in the outer galleries of the night side is not infrequently very foggy. He seemed inclined to marvel that we did not find the sunlight too intense for our eyes, and was interested in my attempt to explain that the sky was tempered to a bluish colour through the refraction of the air, though I doubt if he clearly understood that. I explained how the iris of the human eyes can contract the pupil and save the delicate internal structure from the excess of sunlight, and was allowed to approach within a few feet of the Presence in order that this structure might be seen. This led to a comparison of the lunar and terrestrial eyes. The former is not only excessively sensitive to such light as men can see, but it can also *see* heat, and every difference in temperature within the moon renders objects visible to it.

"The iris was quite a new organ to the Grand Lunar. For a time he amused himself by flashing his rays into my face and watching my pupils contract. As a consequence, I was dazzled and blinded for some little time. . . .

"But in spite of that discomfort, I found something reassuring by insensible degrees in the rationality of this business of question and answer. I could shut my eyes, think of my answer, and almost forget that the Grand Lunar has no face. . . .

"When I had descended again to my proper place the Grand Lunar asked how we sheltered ourselves from heat and storms, and I expounded to him the arts of building and furnishing. Here we wandered into misunderstandings and cross-purposes, due largely, I must admit, to the looseness of my expressions. For a long time I had great difficulty in making him understand the nature of a house. To him and his attendant Selenites it seemed no doubt the most whimsical thing in the world that men should build houses when they might descend into excavations, and an additional complication was introduced by the attempt I made to explain that men had originally begun their homes in caves, and that they were now taking their railways and many establishments beneath the surface. Here I think a desire for intellectual completeness betrayed me. There was also a considerable tangle due to an equally unwise attempt on my part to explain about

mines. Dismissing this topic at last in an incomplete state, the Grand Lunar inquired what we did with the interior of our globe.

"A tide of twittering and piping swept into the remotest corners of that great assembly when it was at last made clear that we men know absolutely nothing of the contents of the world upon which the immemorial generations of our ancestors have been evolved. Three times had I to repeat that of all the 4000 miles of substance between the earth and its centre men knew only to the depth of a mile, and that very vaguely. I understood the Grand Lunar to ask why I had come to the moon seeing we had scarcely touched our own planet yet, but he did not trouble me at that time to proceed to an explanation, being too anxious to pursue the details of this mad inversion of all his ideas.

"He reverted to the question of weather, and I tried to describe the perpetually changing sky, and snow, and frost and hurricanes. 'But when the night comes,' he asked, 'is it not cold?'

"I told him it was colder than by day.

"'And does not your atmosphere freeze?'

"I told him not; that it was never cold enough for that, because our nights were so short.

"'Not even liquefy?'

"I was about to say 'No,' but then it occurred to me that one part at least of our atmosphere, the water vapour of it, does sometimes liquefy and form dew and sometimes freeze and form frost—a process perfectly analogous to the freezing of all the external atmosphere of the moon during its longer night. I made myself clear on this point, and from that the Grand Lunar went on to speak with me of sleep. For the need of sleep that comes so regularly every twenty-four hours to all things is part also of our earthly inheritance. On the moon they rest only at rare intervals and after exceptional exertions. Then I tried to describe to him the soft splendours of a summer night, and from that I passed to a description of those animals that prowl by night and sleep by day. I told him of lions and tigers, and here it seemed that we had come to a deadlock. For, save in their waters, there are no creatures in the moon not absolutely domestic and subject to his will, and so it has been for immemorial years. They have monstrous water creatures, but no evil beasts, and the idea of anything strong and large existing 'outside' in the night is very difficult for them."

[The record is here too broken to transcribe for the space of perhaps twenty words or more.]

"He talked with his attendants, as I suppose, upon the strange superficiality and unreasonableness of (man), who lives on the mere surface of a world, a creature of waves and winds and all the chances of space, who cannot even unite

to overcome the beasts that prey upon his kind, and yet who dares to invade another planet. During this aside I sat thinking, and then at his desire I told him of the different sorts of men. He searched me with questions. 'And for all sorts of work you have the same sort of men. But who thinks? Who governs?'

"I gave him an outline of the democratic method.

"When I had done he ordered cooling sprays upon his brow, and then requested me to repeat my explanation, conceiving something had miscarried.

"'Do they not do different things then?' said Phi-oo.

"Some I admitted were thinkers and some officials; some hunted, some were mechanics, some artists, some toilers. 'But *all* rule,' I said.

"'And have they not different shapes to fit them to their different duties?'

"'None that you can see,' I said, 'except perhaps their clothes. Their minds perhaps differ a little,' I reflected.

"'Their minds must differ a great deal,' said the Grand Lunar, 'or they would all want to do the same things.'

"In order to bring myself into a closer harmony with his preconceptions, I said that his surmise was right. 'It was all hidden in the brain,' I said; 'but the difference was there. Perhaps if one could see the minds and souls of men they would be as varied and unequal as the Selenites. There were great men and small men, men who could reach out far and wide, and men who could go swiftly; noisy, trumpet-minded men, and men who could remember without thinking. . . .'

[The record is indistinct for three words.]

"He interrupted me to recall me to my previous statement. 'But you said all men rule?' he pressed.

"'To a certain extent,' I said, and made, I fear, a denser fog with my explanation.

"He reached out to a salient fact. 'Do you mean,' he asked, 'that there is no Grand Earthly?'

"I thought of several people, but assured him finally there was none. I explained that such autocrats and emperors as we had tried upon earth had usually ended in drink, or vice, or violence, and that the large and influential section of the people of the earth to which I belonged, the Anglo-Saxons, did not mean to try that sort of thing again. At which the Grand Lunar was even more amazed.

"'But how do you keep even such wisdom as you have?' he asked; and I explained to him the way we helped our limited"

[A word omitted here, probably "brains."]

"with libraries of books. I explained to him how our science was growing by the united labours of innumerable little men, and on that he made no comment save that it was evident we had mastered much in spite of our social savagery, or we could

not have come to the moon. Yet the contrast was very marked. With knowledge the Selenites grew and changed; mankind stored their knowledge about them and remained brutes—equipped. He said this" . . .

[Here there is a short piece of the record indistinct.]

"He then caused me to describe how we went about this earth of ours, and I described to him our railways and ships. For a time he could not understand that we had had the use of steam only one hundred years, but when he did he was clearly amazed. I may mention as a singular thing that the Selenites use years to count by, just as we do on earth, though I can make nothing of their numeral system. That, however, does not matter, because Phi-oo understands ours. From that I went on to tell him that mankind had dwelt in cities only for nine or ten thousand years, and that we were still not united in one brotherhood, but under many different forms of government. This astonished the Grand Lunar very much, when it was made clear to him. At first he thought we referred merely to administrative areas.

"'Our States and Empires are still the rawest sketches of what order will some day be,' I said, and so I came to tell him." . . .

[At this point a length of record that probably represents thirty or forty words is totally illegible.]

"The Grand Lunar was greatly impressed by the folly of men in clinging to the inconvenience of diverse tongues. 'They want to communicate and yet not to communicate,' he said, and then for a long time he questioned me closely concerning war.

"He was at first perplexed and incredulous. 'You mean to say,' he asked, seeking confirmation, 'that you run about over the surface of your world—this world, whose riches you have scarcely begun to scrape—killing one another for beasts to eat?'

"I told him that was perfectly correct.

"He asked for particulars to assist his imagination. 'But do not your ships and your poor little cities get injured?' he asked, and I found the waste of property and conveniences seemed to impress upon him almost as much as the killing. 'Tell me more,' said the Grand Lunar; 'make me see pictures. I cannot conceive these things.'

"And so, for a space, though something loth, I told him the story of earthly War.

"I told him of the first orders and ceremonies of war, of warnings and ultimatims, and the marshalling and marching of troops. I gave him an idea of manœuvres and positions and battle joined. I told him of sieges and assaults, of starvation and hardship in trenches, and of sentinels freezing in the snow. I told him of routs and surprises, and desperate last stands and faint hopes, and the pitiless pursuit of fugitives and the dead upon the field. I told, too, of the past, of

invasions and massacres, of the Huns and Tartars, and the wars of Mahomet and the Caliphs and of the Crusades. And as I went on, and Phi-oo translated, the Selenites cooed and murmured in a steadily intensified emotion.

"I told them an ironclad could fire a shot of a ton twelve miles, and go through twenty feet of iron—and how we could steer torpedoes under water. I went on to describe a Maxim gun in action and what I could imagine of the Battle of Colenso. The Grand Lunar was so incredulous that he interrupted the translation of what I had said in order to have my verification of my account. They particularly doubted my description of the men cheering and rejoicing as they went into battle.

"'But surely they do not like it!' translated Phi-oo.

"I assured them men of my race considered battle the most glorious experience of life, at which the whole assembly was stricken with amazement.

"'But what good is this war?' asked the Grand Lunar, sticking to his theme.

"'Oh! as for *good*!' said I, 'it thins the population!'

"'But why should there be a need——?' . . .

"There came a pause, the cooling sprays impinged upon his brow, and then he spoke again."

At this point there suddenly becomes predominant in the record a series of undulations that have been apparent as a perplexing complication as far back as Cavor's description of the silence that fell before the first speaking of the Grand Lunar. These undulations are evidently the result of radiations proceeding from the lunar source, and their persistent approximation to the alternating signals of Cavor is curiously suggestive of some operator deliberately seeking to mix them in with his message and render it illegible. At first they are small and regular, so that with a little care and the loss of very few words we have been able to disentangle Cavor's message; then they become broad and larger, then suddenly they are irregular, with an irregularity that gives the effect at last of some one scribbling through a line of writing. For a long time nothing can be made of this madly zigzagging trace; then quite abruptly the interruption ceases, leaves a few words clear, and then resumes and continues for all the rest of the message, completely obliterating whatever Cavor was attempting to transmit. Why, if this is indeed a deliberate intervention, the Selenites should have preferred to let Cavor go on transmitting his message in happy ignorance of their obliteration of its record, when it was clearly quite in their power and much more easy and convenient for them to stop his proceedings at any time, is a problem to which I can contribute nothing. The thing seems to have happened so, and that is all I can say. This last rag of his description of the Grand Lunar begins, in mid-sentence:—

"interrogated me very closely upon my secret. I was able in a little while to get to an understanding with them, and at last to elucidate what has been a puzzle to me ever since I realised the vastness of their science, namely, how it is they themselves have never discovered 'Cavorite.' I find they know of it as a theoretical substance, but they have always regarded it as a practical impossibility, because for some reason there is no helium in the moon, and helium——"

[Across the last letters of helium slashes the resumption of that obliterating trace. Note that word "secret," for on that, and that alone, I base my interpretation of the last message, as both Mr. Wendigee and myself now believe it to be, that he is ever likely to send us.]

CHAPTER TWENTY-FIVE

THE LAST MESSAGE CAVOR SENT TO THE EARTH

In this unsatisfactory manner the penultimate message of Cavor dies out. One seems to see him away there amidst his blue-lit apparatus intently signalling us to the last, all unaware of the curtain of confusion that drops between us; all unaware, too, of the final dangers that even then must have been creeping upon him. His disastrous want of vulgar common sense had utterly betrayed him. He had talked of war, he had talked of all the strength and irrational violence of men, of their insatiable aggressions, their tireless futility of conflict. He had filled the whole moon-world with this impression of our race, and then I think it is plain he admitted that upon himself alone hung the possibility—at least for a long time—of any other men reaching the moon. The line the cold, inhuman reason of the moon would take seems plain enough to me, and suspicion of it, and then perhaps some sudden sharp realisation of it, must have come to him. One imagines him going about the moon with the remorse of this fatal indiscretion growing in his mind. During a certain time most assuredly the Grand Lunar was deliberating the new situation, and for all that time Cavor went as free as ever he had gone. We imagine that obstacles of some sort prevented his getting to his electro-magnetic apparatus again after that last message I have given. For some days we received nothing. Perhaps he was having fresh audiences, and trying to evade his previous admissions. Who can hope to guess?

And then suddenly, like a cry in the night, like a cry that is followed by a stillness, came the last message. It is the briefest fragment, the broken beginnings of two sentences.

The first was:

"I was mad to let the Grand Lunar know——"

There was an interval of perhaps a minute. One imagines some interruption from without. A departure from the instrument—a dreadful hesitation among the looming masses of apparatus in that dim, blue-lit cavern—a sudden rush back to it, full of a resolve that came too late. Then, as if it were hastily transmitted, came:

"Cavorite made as follows: take——"

There followed one word, a quite unmeaning word as it stands——

"uless."

And that is all.

It may be he made a hasty attempt to spell "useless" when his fate was close upon him. Whatever it was that was happening about that apparatus, we cannot tell. Whatever it was we shall never, I know, receive another message from

the moon. For my own part a vivid dream has come to my help, and I see, almost as plainly as though I had seen it in actual fact, a blue-lit dishevelled Cavor struggling in the grip of a great multitude of those insect Selenites, struggling ever more desperately and hopelessly as they swarm upon him, shouting, expostulating, perhaps even at last fighting, and being forced backward step by step out of all speech or sign of his fellows, for evermore into the Unknown—into the dark, into that silence that has no end.

THE END

THE WORLD SET FREE

TO

FREDERICK SODDY'S

"INTERPRETATION OF RADIUM"

THIS STORY, WHICH OWES LONG PASSAGES
TO THE ELEVENTH CHAPTER OF
THAT BOOK, ACKNOWLEDGES
AND INSCRIBES
ITSELF

PREFACE

THE *World Set Free* was written in 1913 and published early in 1914, and it is the latest of a series of three fantasias of possibility, stories which all turn on the possible developments in the future of some contemporary force or group of forces. *The World Set Free* was written under the immediate shadow of the Great War. Every intelligent person in the world felt that disaster was impending and knew no way of averting it, but few of us realised in the earlier half of 1914 how near the crash was to us. The reader will be amused to find that here it is put off until the year 1956. He may naturally want to know the reason for what will seem now a quite extraordinary delay. As a prophet, the author must confess he has always been inclined to be rather a slow prophet. The war aeroplane in the world of reality, for example, beat the forecast in *Anticipations* by about twenty years or so. I suppose a desire not to shock the sceptical readers' sense of use and wont and perhaps a less creditable disposition to hedge, have something to do with this dating forward of one's main events, but in the particular case of *The World Set Free* there was, I think, another motive in holding the Great War back, and that was to allow the chemist to get well forward with his discovery of the release of atomic energy. 1956—or for that matter 2056—may be none too late for that crowning revolution in human potentialities. And apart from this procrastination of over forty years, the guess at the opening phase of the war was fairly lucky; the forecast of an alliance of the Central Empires, the opening campaign through the Netherlands, and the dispatch of the British Expeditionary Force were all justified before the book had been published six months. And the opening section of Chapter Two remains now, after the reality has happened, a fairly adequate diagnosis of the essentials of the matter. One happy hit (in Chapter Two, § 2), on which the writer may congratulate himself, is the forecast that under modern conditions it would be quite impossible for any great general to emerge to supremacy and concentrate the enthusiasm of the armies of either side. There could be no Alexanders or Napoleons. And we soon heard the scientific corps muttering "These old fools" exactly as it is here foretold.

These, however, are small details, and the misses in the story far outnumber the hits. It is the main thesis which is still of interest now; the thesis that because of the development of scientific knowledge, separate sovereign states and separate sovereign empires are no longer possible in the world,

that to attempt to keep on with the old system is to heap disaster upon disaster for mankind and perhaps to destroy our race altogether. The remaining interest of this book now is the sustained validity of this thesis and the discussion of the possible ending of war on the earth. I have supposed a sort of epidemic of sanity to break out among the rulers of states and the leaders of mankind. I have represented the native common sense of the French mind and of the English mind—for manifestly King Egbert is meant to be "God's Englishman"—leading mankind towards a bold and resolute effort of salvage and reconstruction.

Instead of which, as the school-book footnotes say, compare to-day's newspaper. Instead of a frank and honourable gathering of leading men, Englishman meeting German and Frenchman Russian, brothers in their offences and in their disaster upon the hills of Brissago, behold in Geneva at the other end of Switzerland a poor little League of (Allied) Nations (excluding the United States, Russia, and most of the "subject peoples" of the world), meeting obscurely amidst a world-wide disregard to make impotent gestures at the leading problems of the debacle. Either the disaster has not been vast enough yet or it has not been swift enough to inflict the necessary moral shock and achieve the necessary moral revulsion. Just as the world of 1913 was used to an increasing prosperity and thought that increase would go on for ever, so now it would seem the world is growing accustomed to a steady glide towards social disintegration, and thinks that that too can go on continually and never come to a final bump. So soon do use and wont establish themselves, and the most flaming and thunderous of lessons pale into disregard.

The question whether a Leblanc is still possible, the question whether it is still possible to bring about an outbreak of creative sanity in mankind, to avert this steady glide to destruction, is now one of the most urgent in the world. It is clear that the writer is temperamentally disposed to hope that there is such a possibility. But he has to confess that he sees few signs of any such breadth of understanding and steadfastness of will as an effectual effort to turn the rush of human affairs demands. The inertia of dead ideas and old institutions carries us on towards the rapids. Only in one direction is there any plain recognition of the idea of a human commonweal as something overriding any national and patriotic consideration, and that is in the working class movement throughout the world. And labour internationalism is closely bound up with conceptions of a profound social revolution. If world peace is to be attained through labour internationalism, it will have to be attained at the price of the completest social and economic reconstruction and by passing through a phase of revolution that will certainly be violent, that may be very bloody, which may be prolonged through a long period, and may in the end fail

to achieve anything but social destruction. Nevertheless, the fact remains that it is in the labour class, and the labour class alone, that any conception of a world rule and a world peace has so far appeared. The dream of *The World Set Free*, a dream of highly educated and highly favoured leading and ruling men, voluntarily setting themselves to the task of reshaping the world, has thus far remained a dream.

H. G. WELLS.

EASTON GLEBE, DUNMOW, 1921.

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PRELUDE

THE SUN SNARERS

§ 1

THE history of mankind is the history of the attainment of external power. Man is the tool-using, fire-making animal. From the outset of his terrestrial career we find him supplementing the natural strength and bodily weapons of a beast by the heat of burning and the rough implement of stone. So he passed beyond the ape. From that he expands. Presently he added to himself the power of the horse and the ox, he borrowed the carrying strength of water and the driving force of the wind, he quickened his fire by blowing, and his simple tools, pointed first with copper and then with iron, increased and varied and became more elaborate and efficient. He sheltered his heat in houses and made his way easier by paths and roads. He complicated his social relationships and increased his efficiency by the division of labour. He began to store up knowledge. Contrivance followed contrivance, each making it possible for a man to do more. Always down the lengthening record, save for a setback ever and again, he is doing more. . . .

A quarter of a million years ago the utmost man was a savage, a being scarcely articulate, sheltering in holes in the rocks, armed with a rough-hewn flint or a fire-pointed stick, naked, living in small family groups, killed by some younger man so soon as his virile activity declined. Over most of the great wildernesses of earth you would have sought him in vain; only in a few temperate and sub-tropical river valleys would you have found the squatting lairs of his little herds, a male, a few females, a child or so.

He knew no future then, no kind of life except the life he led. He fled the cave-bear over the rocks full of iron ore and the promise of sword and spear; he froze to death upon a ledge of coal; he drank water muddy with the clay that would one day make cups of porcelain; he chewed the ear of wild wheat he had plucked and gazed with a dim speculation in his eyes at the birds that soared beyond his reach. Or suddenly he became aware of the scent of another male and rose up roaring, his roars the formless precursors of moral admonitions. For he was a great individualist, that original, he suffered none other than himself.

So through the long generations this heavy precursor, this ancestor of all of us, fought and bred and perished, changing almost imperceptibly.

Yet he changed. That keen chisel of necessity which sharpened the tiger's claw age by age and fined down the

clumsy Orchippus to the swift grace of the horse, was at work upon him—is at work upon him still. The clumsier and more stupidly fierce among him were killed soonest and oftenest; the finer hand, the quicker eye, the bigger brain, the better balanced body prevailed; age by age, the implements were a little better made, the man a little more delicately adjusted to his possibilities. He became more social; his herd grew larger; no longer did each man kill or drive out his growing sons; a system of taboos made them tolerable to him, and they revered him alive and soon even after he was dead, and were his allies against the beasts and the rest of mankind. (But they were forbidden to touch the women of the tribe, they had to go out and capture women for themselves, and each son fled from his stepmother and hid from her lest the anger of the Old Man should be roused. All the world over, even to this day, these ancient inevitable taboos can be traced.) And now instead of caves came huts and hovels, and the fire was better tended and there were wrappings and garments; and so aided, the creature spread into colder climates, carrying food with him, storing food—until sometimes the neglected grass-seed sprouted again and gave a first hint of agriculture.

And already there were the beginnings of leisure and thought.

Man began to think. There were times when he was fed, when his lusts and his fears were all appeased, when the sun shone upon the squatting-place and dim stirrings of speculation lit his eyes. He scratched upon a bone and found resemblance and pursued it and began pictorial art, moulded the soft warm clay of the river brink between his fingers and found a pleasure in its patternings and repetitions, shaped it into the form of vessels and found that it would hold water. He watched the streaming river and wondered from what bountiful breast this incessant water came; he blinked at the sun and dreamt that perhaps he might snare it and spear it as it went down to its resting-place amidst the distant hills. Then he was roused to convey to his brother that once indeed he had done so—at least that some one had done so—he mixed that perhaps with another dream almost as daring, that one day a mammoth had been beset; and therewith began fiction—pointing a way to achievement—and the august prophetic procession of tales.

For scores and hundreds of centuries, for myriads of generations that life of our fathers went on. From the beginning to the ripening of that phase of human life, from the first clumsy eolith of rudely chipped flint to the first implements of polished stone, was two or three thousand centuries, ten or fifteen thousand generations. So slowly, by human standards, did humanity gather itself together out of the dim intimations of the beast. And that first glimmering of speculation, that first story of achievement, that story-teller bright-eyed and flushed under his matted hair gesticulating to his gaping

incredulous listener, gripping his wrist to keep him attentive, was the most marvellous beginning this world has ever seen. It doomed the mammoths, and it began the setting of that snare that shall catch the sun.

§ 2

That dream was but a moment in a man's life, whose proper business it seemed was to get food and kill his fellows and beget after the manner of all that belongs to the fellowship of the beasts. About him, hidden from him by the thinnest of veils, were the untouched sources of Power, whose magnitude we scarcely do more than suspect even to-day, Power that could make his every conceivable dream come real. But the feet of the race were in the way of it, though he died blindly unknowing.

At last, in the generous levels of warm river valleys, where food is abundant and life very easy, the emerging human, overcoming his earlier jealousies, becoming, as necessity persecuted him less urgently, more social and tolerant and amenable, achieved a larger community. There began a division of labour, certain of the older men specialised in knowledge and direction, a strong man took the fatherly leadership in war, and priest and king began to develop their rôles in the opening drama of man's history. The priest's solicitude was seed-time and harvest and fertility, and the king ruled peace and war. In a hundred river valleys about the warm temperate zone of the earth there were already towns and temples, a score of thousand years ago. They flourished unrecorded, ignoring the past and unsuspicious of the future, for as yet writing had still to begin.

Very slowly did man increase his demand upon the illimitable wealth of Power that offered itself to him on every hand. He tamed certain animals, he developed his primordially haphazard agriculture into a ritual, he added first one metal to his resources and then another until he had copper and tin and iron and lead and gold and silver to supplement his stone, he hewed and carved wood, made pottery, paddled down his river until he came to the sea, discovered the wheel and made the first roads. But his chief activity for a hundred centuries and more was the subjugation of himself and others to larger and larger societies. The history of man is not simply the conquest of external power; it is first the conquest of those distrusts and fiercenesses, that self-concentration and intensity of animalism, that tie his hands from taking his inheritance. The ape in us still resents association. From the dawn of the age of polished stone to the achievement of the Peace of the World, man's dealings were chiefly with himself and his fellow-man, trading, bargaining, lawmaking, propitiating, enslaving, conquering, exterminating, and every

little increment in Power, he turned at once and always turns to the purposes of this confused elaborate struggle to socialise. To incorporate and comprehend his fellow-men into a community of purpose became the last and greatest of his instincts. Already before the last polished phase of the stone age was over he had become a political animal. He made astonishingly far-reaching discoveries within himself, first of counting and then of writing and making records, and with that his town communities began to stretch out to dominion; in the valleys of the Nile, the Euphrates and the great Chinese rivers, the first empires and the first written laws had their beginnings. Men specialised for fighting and rule as soldiers and knights. Later, as ships grew seaworthy, the Mediterranean which had been a barrier became a highway; and at last out of a tangle of pirate polities came the great struggle of Carthage and Rome. The history of Europe is the history of the victory and breaking up of the Roman Empire. Every ascendant monarch in Europe up to the last aped Cæsar and called himself Kaiser or Czar or Imperator or Kasir-i-Hind. Measured by the duration of human life it is a vast space of time between that first dynasty in Egypt and the coming of the aeroplane, but by the scale that looks back to the makers of the eoliths, it is all of it a story of yesterday.

Now during this period of two hundred centuries or more, this period of the warring states, while men's minds were chiefly preoccupied by politics and mutual aggression, their progress in the acquirement of external Power was slow—rapid in comparison with the progress of the old stone age, but slow in comparison with this new age of systematic discovery in which we live. They did not very greatly alter the weapons and tactics of warfare, the methods of agriculture, seamanship, their knowledge of the habitable globe, or the devices and utensils of domestic life between the days of the early Egyptians and the days when Christopher Columbus was a child. Of course there were inventions and changes, but there were also retrogressions; things were found out and then forgotten again; it was on the whole a progress, but it contained no steps; the peasant life was the same, there were already priests and lawyers and town craftsmen and territorial lords and rulers, doctors, wise women, soldiers and sailors in Egypt and China and Assyria and south-eastern Europe at the beginning of that period, and they were doing much the same things and living much the same life as they were in Europe in A.D. 1500. The English excavators of the year A.D. 1900 could delve into the remains of Babylon and Egypt and disinter legal documents, domestic accounts and family correspondence that they could read with the completest sympathy. There were great religious and moral changes throughout the period, empires and republics replaced one another, Italy tried a vast experiment in slavery, and indeed

slavery was tried again and again and failed and failed and was still to be tested again and rejected again in the New World ; Christianity and Mahometanism swept away a thousand more specialised cults, but were, essentially, progressive adaptations of mankind to material conditions that must have seemed fixed for ever. The idea of revolutionary changes in the material conditions of life would have been entirely strange to human thought through all that time.

Yet the dreamer, the story-teller, was there still, waiting for his opportunity amidst the busy preoccupations, the comings and goings, the wars and processions, the castle-building and cathedral-building, the arts and loves, the small diplomacies and incurable feuds, the crusades and trading journeys of the middle ages. He no longer speculated with the untrammelled freedom of the stone-age savage ; authoritative explanations of everything barred his path ; but he speculated with a better brain, sat idle and gazed at circling stars in the sky and mused upon the coin and crystal in his hand. Whenever there was a certain leisure for thought throughout these times, then men were to be found dissatisfied with the appearances of things, dissatisfied with the assurances of orthodox belief, uneasy with a sense of unread symbols in the world about them, questioning the finality of scholastic wisdom. Through all the ages of history there were men to whom this whisper had come of hidden things about them. They could no longer lead ordinary lives nor content themselves with the common things of this world once they had heard this voice. And mostly they believed not only that all this world was as it were a painted curtain before things unguessed at, but that these secrets were Power. Hitherto Power had come to men by chance, but now there were these seekers, seeking, seeking among rare and curious and perplexing objects, sometimes finding some odd utilisable thing, sometimes deceiving themselves with fancied discovery, sometimes pretending to find. The world of every day laughed at these eccentric beings, or found them annoying and ill-treated them, or was seized with fear and made saints and sorcerers and warlocks of them, or with covetousness and entertained them hopefully ; but for the greater part heeded them not at all. Yet they were of the blood of him who had first dreamt of attacking the mammoth ; every one of them was of his blood and descent ; and the thing they sought, all unwittingly, was the snare that will some day catch the sun.

§ 3

Such a man was that Leonardo da Vinci, who went about the court of Sforza in Milan in a state of dignified abstraction. His commonplace books are full of prophetic subtlety and ingenious anticipations of the methods of the early aviators.

Dürer was his parallel and Roger Bacon—whom the Franciscans silenced—of his kindred. Such a man again in an earlier city was Hero of Alexandria, who knew of the power of steam nineteen hundred years before it was first brought into use. And earlier still was Archimedes of Syracuse, and still earlier the legendary Dædalus of Cnossos. All up and down the record of history whenever there was a little leisure from war and brutality the seekers appeared. And half the alchemists were of their tribe.

When Roger Bacon blew up his first batch of gunpowder one might have supposed that men would have gone at once to the explosive engine. But they could see nothing of the sort. They were not yet beginning to think of seeing things ; their metallurgy was all too poor to make such engines even had they thought of them. For a time they could not make instruments sound enough to stand this new force even for so rough a purpose as hurling a missile. Their first guns had barrels of coopered timber, and the world waited for more than five hundred years before the explosive engine came.

Even when the seekers found, it was at first a long journey before the world could use their findings for any but the roughest, most obvious purposes. If man in general was not still as absolutely blind to the unconquered energies about him as his paleolithic precursor, he was at best purblind.

§ 4

The latent energy of coal and the power of steam waited long on the verge of discovery before they began to influence human lives.

There were no doubt many such devices as Hero's toys devised and forgotten, time after time, in courts and palaces, but it needed that coal should be mined and burning with plenty of iron at hand before it dawned upon men that here was something more than a curiosity. And it is to be remarked that the first recorded suggestion for the use of steam was in war ; there is an Elizabethan pamphlet in which it is proposed to fire shot out of corked iron bottles full of heated water. The mining of coal for fuel, the smelting of iron upon a larger scale than men had ever attempted before, the steam-pumping engine, the steam-engine and the steamboat, followed one another in an order that had a kind of logical necessity. It is the most interesting and instructive chapter in the history of the human intelligence, the history of steam from its beginning as a fact in human consciousness to the perfection of the great turbine engines that preceded the utilisation of intra-molecular power. Nearly every human being must have seen steam, seen it incuriously for many thousands of years ; the women in particular were always heating water, boiling it, seeing it boil away, seeing the lids of vessels dance with its fury;

millions of people at different times must have watched steam pitching rocks out of volcanoes like cricket balls and blowing pumice into foam, and yet you may search the whole human record through, letters, books, inscriptions, pictures, for any glimmer of a realisation that here was force, here was strength to borrow and use. . . . Then suddenly man woke up to it, the railways spread like a network over the globe, the ever enlarging iron steamships began their staggering fight against wind and wave.

Steam was the first-comer in the new powers, it was the beginning of the Age of Energy that was to close the long history of the Warring States.

But for a long time men did not realise the importance of this novelty. They would not recognise, they were not able to recognise that anything fundamental had happened to their immemorial necessities. They called the steam-engine the "iron horse" and pretended that they had made the most partial of substitutions. Steam machinery and factory production were visibly revolutionising the conditions of industrial production, population was streaming steadily in from the countryside and concentrating in hitherto unthought-of masses about a few city centres, food was coming to them over enormous distances upon a scale that made the one sole precedent, the corn ships of imperial Rome, a petty incident; and a huge migration of peoples between Europe and western Asia and America was in progress, and—nobody seems to have realised that something new had come into human life, a strange swirl different altogether from any previous circling and mutation, a swirl like the swirl when at last the lock gates begin to open after a long phase of accumulating water and eddying inactivity. . . .

The sober Englishman at the close of the nineteenth century could sit at his breakfast-table, decide between tea from Ceylon or coffee from Brazil, devour an egg from France with some Danish ham, or eat a New Zealand chop, wind up his breakfast with a West Indian banana, glance at the latest telegrams from all the world, scrutinise the prices current of his geographically distributed investments in South Africa, Japan and Egypt, and tell the two children he had begotten (in the place of his father's eight) that he thought the world changed very little. They must play cricket, keep their hair cut, go to the old school he had gone to, shirk the lessons he had shirked, learn a few scraps of Horace and Virgil and Homer for the confusion of cads, and all would be well with them. . . .

§ 5

Electricity, though it was perhaps the earlier of the two to be studied, invaded the common life of men a few decades

after the exploitation of steam. To electricity also, in spite of its provocative nearness all about him, mankind had been utterly blind for incalculable ages.

Could anything be more emphatic than the appeal of electricity for attention? It thundered at man's ears, it signalled to him in blinding flashes, occasionally it killed him, and he could not see it as a thing that concerned him enough to merit study. It came into the house with the cat on any dry day and crackled insinuatingly whenever he stroked her fur. It rotted his metals when he put them together. . . . There is no single record that any one questioned why the cat's fur crackles or why hair is so unruly to brush on a frosty day, before the sixteenth century. For endless years man seems to have done his very successful best not to think about it at all: until this new spirit of the Seeker turned itself to these things.

How often things must have been seen and dismissed as unimportant, before the speculative eye and the moment of vision came! It was Gilbert, Queen Elizabeth's court physician, who first puzzled his brains with rubbed amber and bits of glass and silk and shellac and so began the quickening of the human mind to the existence of this universal presence. And even then the science of electricity remained a mere little group of curious facts for nearly two hundred years, connected perhaps with magnetism—a mere guess that—perhaps with the lightning. Frogs' legs must have hung by copper hooks from iron railings and twitched upon countless occasions before Galvani saw them. Except for the lightning conductor, it was two hundred and fifty years after Gilbert before electricity stepped out of the cabinet of scientific curiosities into the life of the common man. . . . Then suddenly, in the half-century between 1880 and 1930, it ousted the steam-engine and took over traction, it ousted every other form of household heating, abolished distance with the perfected wireless telephone and the telephotograph. . . .

§ 6

And there was an extraordinary mental resistance to discovery and invention for at least a hundred years after the scientific revolution had begun. Each new thing made its way into practice against a scepticism that amounted at times to hostility. One writer upon these subjects gives a funny little domestic conversation that happened, he says, in the year 1898, within ten years, that is, of the time when the first aviators were fairly on the wing. He tells us how he sat at his desk in his study and conversed with his little boy.

His little boy was in profound trouble. He felt he had to speak very seriously to his father, and as he was a kindly little boy he did not want to do it too harshly.

This is what happened.

"I wish, Daddy," he said, coming to his point, "that you wouldn't write all this stuff about flying. The chaps rot me."

"Yes?" said his father.

"And old Broomie, the Head I mean, he rots me. Everybody rots me."

"But there is going to be flying—quite soon."

The little boy was too well bred to say what he thought of that. "Anyhow," he said, "I wish you wouldn't write about it."

"You'll fly—lots of times—before you die," the father assured him.

The little boy looked unhappy.

The father hesitated. Then he opened a drawer and took out a blurred and under-developed photograph. "Come and look at this," he said.

The little boy came round to him. The photograph showed a stream and a meadow beyond and some trees, and in the air a black pencil-like object with flat wings on either side of it. It was the first record of the first apparatus heavier than air that ever maintained itself in the air by mechanical force. Across the margin was written: "Here we go up, up, up—from S. P. Langley, Smithsonian Institution, Washington."

The father watched the effect of this reassuring document upon his son. "Well?" he said.

"That," said the schoolboy after reflection, "is only a model."

"Model to-day, man to-morrow."

The boy seemed divided in his allegiance. Then he decided for what he believed quite firmly to be omniscience. "But old Broomie," he said, "he told all the boys in his class only yesterday, 'no man will ever fly.' No one, he says, who has ever shot grouse or pheasants on the wing would ever believe anything of the sort. . . ."

Yet that boy lived to fly across the Atlantic and edit his father's reminiscences.

§ 7

At the close of the nineteenth century, as a multitude of passages in the literature of that time witness, it was thought that the fact that man had at last had successful and profitable dealings with the steam that scalded him and the electricity that flashed and banged about the sky at him, was an amazing and perhaps a culminating exercise of his intelligence and his intellectual courage. The air of "Nunc Dimittis" sounds in some of these writings. "The great things are discovered," wrote Gerald Brown in his summary

of the nineteenth century. "For us there remains little but the working out of detail." The spirit of the seeker was still rare in the world; education was unskilled, unstimulating, scholarly and but little valued, and few people even then could have realised that Science was still but the flimsiest of trial sketches and discovery scarcely beginning. No one seems to have been afraid of science and its possibilities. Yet now where there had been but a score or so of seekers, there were many thousands, and for one needle of speculation that had been probing the curtain of appearances in 1800, there were now hundreds. And already Chemistry, which had been content with her atoms and molecules for the better part of a century, was preparing herself for that vast next stride that was to revolutionise the whole life of man from top to bottom.

One realises how crude was the science of that time when one considers the case of the composition of air. This was determined by that strange genius and recluse, that man of mystery, that disembowelled intelligence, Henry Cavendish, towards the end of the eighteenth century. So far as he was concerned the work was admirably done. He separated all the known ingredients of the air with a precision altogether remarkable; he even put it upon record that he had some doubt about the purity of the nitrogen. For more than a hundred years his determination was repeated by chemists all the world over, his apparatus was treasured in London, he became as they used to say "classic," and always, at every one of the innumerable repetitions of his experiment, that sly element argon was hiding among the nitrogen (and with a little helium and traces of other substances, and indeed all the hints that might have led to the new departures of the twentieth century chemistry) and every time it slipped unobserved through the professorial fingers that repeated his procedure.

Is it any wonder then with this margin of inaccuracy, that up to the very dawn of the twentieth century scientific discovery was still rather a procession of happy accidents than an orderly conquest of nature?

Yet the spirit of seeking was spreading steadily through the world. Even the schoolmaster could not check it. For the mere handful who grew up to feel wonder and curiosity about the secrets of nature in the nineteenth century, there were now at the beginning of the twentieth myriads escaping from the limitations of intellectual routine and the habitual life, in Europe, in America, North and South, in Japan, in China and all about the world.

It was in 1910 that the parents of young Holsten, who was to be called by a whole generation of scientific men "the greatest of European chemists," were staying in a villa near Santo Domenico between Fiesole and Florence. He was

then only fifteen, but he was already distinguished as a mathematician and possessed by a savage appetite to understand. He had been particularly attracted by the mystery of phosphorescence and its apparent unrelatedness to every other source of light. He was to tell afterwards in his reminiscences how he watched the fireflies drifting and glowing among the dark trees in the garden of the villa under the warm blue night sky of Italy ; how he caught and kept them in cages, dissected them, first studying the general anatomy of insects very elaborately, and how he began to experiment with the effect of various gases and varying temperature upon their light. Then the chance present of a little scientific toy invented by Sir William Crookes, a toy called the spinthariscope, on which radium particles impinge upon sulphide of zinc and make it luminous, induced him to associate the two sets of phenomena. It was a happy association for his inquiries. It was a rare and fortunate thing, too, that any one with the mathematical gift should have been taken by these curiosities.

§ 8

And while the boy Holsten was mooning over his fireflies at Fiesole, a certain professor of physics named Rufus was giving a course of afternoon lectures upon Radium and Radio-Activity in Edinburgh. They were lectures that had attracted a very considerable amount of attention. He gave them in a small lecture-theatre that had become more and more congested as his course proceeded. At his concluding discussion it was crowded right up to the ceiling at the back, and there people were standing, standing without any sense of fatigue, so fascinating did they find his suggestions. One youngster in particular, a chuckle-headed, scrub-haired lad from the Highlands, sat hugging his knee with great sand-red hands and drinking in every word, eyes aglow, cheeks flushed and ears burning.

"And so," said the professor, "we see that this Radium, which seemed at first a fantastic exception, a mad inversion of all that was most established and fundamental in the constitution of matter, is really at one with the rest of the elements. It does noticeably and forcibly what probably all the other elements are doing with an imperceptible slowness. It is like the single voice crying aloud that betrays the silent breathing multitude in the darkness. Radium is an element that is breaking up and flying to pieces. But perhaps all elements are doing that at less perceptible rates. Uranium certainly is ; thorium—the stuff of this incandescent gas mantle—certainly is ; actinium. I feel that we are but beginning the list. And we know now that the atom, that once we thought hard and impenetrable, and indivisible and

final and—lifeless—lifeless, is really a reservoir of immense energy. That is the most wonderful thing about all this work. A little while ago we thought of the atoms as we thought of bricks, as solid building material, as substantial matter, as unit masses of lifeless stuff, and behold! these bricks are boxes, treasure boxes, boxes full of the intensest force. This little bottle contains about a pint of uranium oxide; that is to say about fourteen ounces of the element uranium. It is worth about a pound. And in this bottle, ladies and gentlemen, in the atoms in this bottle there slumbers at least as much energy as we could get by burning a hundred and sixty tons of coal. If at a word, in one instant I could suddenly release that energy here and now it would blow us and everything about us to fragments; if I could turn it into the machinery that lights this city, it could keep Edinburgh brightly lit for a week. But at present no man knows, no man has an inkling of how this little lump of stuff can be made to hasten the release of its store. It does release it, as a burn trickles. Slowly the uranium changes into radium, the radium changes into a gas called the radium emanation, and that again to what we call radium A, and so the process goes on, giving out energy at every stage, until at last we reach the last stage of all, which is, so far as we can tell at present, lead. But we cannot hasten it."

"I take ye, man," whispered the chuckle-headed lad, with his red hands tightening like a vice upon his knee. "I take ye, man. Go on! Oh, go on!"

The professor went on after a little pause. "Why is the change gradual?" he asked. "Why does only a minute fraction of the radium disintegrate in any particular second? Why does it dole itself out so slowly and so exactly? Why does not all the uranium change to radium and all the radium change to the next lowest thing at once? Why this decay by driblets; why not a decay *en masse*? . . . Suppose presently we find it is possible to quicken that decay?"

The chuckle-headed lad nodded rapidly. The wonderful inevitable idea was coming. He drew his knee up towards his chin and swayed in his seat with excitement. "Why not?" he echoed, "why not?"

The professor lifted his forefinger.

"Given that knowledge," he said, "mark what we should be able to do! We should not only be able to use this uranium and thorium; not only should we have a source of power so potent that a man might carry in his hand the energy to light a city for a year, fight a fleet of battleships or drive one of our giant liners across the Atlantic; but we should also have a clue that would enable us at last to quicken the process of disintegration in all the other elements, where decay is still so slow as to escape our finest measurements. Every scrap of solid matter in the world would become an available reservoir

of concentrated force. Do you realise, ladies and gentlemen, what these things would mean for us ? "

The scrub head nodded. " Oh ! go on. Go on."

" It would mean a change in human conditions that I can only compare to the discovery of fire, that first discovery that lifted man above the brute. We stand to-day towards radio-activity exactly as our ancestor stood towards fire before he had learned to make it. He knew it then only as a strange thing utterly beyond his control, a flare on the crest of the volcano, a red destruction that poured through the forest. So it is that we know radio-activity to-day. This—this is the dawn of a new day in human living. At the climax of that civilisation which had its beginning in the hammered flint and the fire-stick of the savage, just when it is becoming apparent that our ever-increasing needs cannot be borne indefinitely by our present sources of energy, we discover suddenly the possibility of an entirely new civilisation. The energy we need for our very existence, and with which Nature supplies us still so grudgingly, is in reality locked up in inconceivable quantities all about us. We cannot pick that lock at present, but——"

He paused. His voice sank so that everybody strained a little to hear him.

" —we will."

He put up that lean finger again, his solitary gesture.

" And then," he said. . . .

" Then that perpetual struggle for existence, that perpetual struggle to live on the bare surplus of Nature's energies will cease to be the lot of Man. Man will step from the pinnacle of this civilisation to the beginning of the next. I have no eloquence, ladies and gentlemen, to express the vision of man's material destiny that opens out before me. I see the desert continents transformed, the poles no longer wildernesses of ice, the whole world once more Eden. I see the power of man reach out among the stars. . . ."

He stopped abruptly with a catching of the breath that many an actor or orator might have envied. . . .

The lecture was over, the audience hung silent for a few seconds, sighed, became audible, stirred, fluttered, prepared for dispersal. More light was turned on and what had been a dim mass of figures became a bright confusion of movement. Some of the people signalled to friends, some crowded down towards the platform to examine the lecturer's apparatus and make notes of his diagrams. But the chuckle-headed lad with the scrub-hair wanted no such detailed frittering away of the thoughts that had inspired him. He wanted to be alone with them ; he elbowed his way out almost fiercely, he made himself as angular and bony as a cow, fearing lest some one should speak to him, lest some one should invade his glowing sphere of enthusiasm.

He went through the streets with a rapt face, like a saint who sees visions. He had arms disproportionately long, and ridiculous big feet.

He must get alone, get somewhere high out of all this crowding commonness of every-day life.

He made his way to the top of Arthur's Seat, and there he sat for a long time in the golden evening sunshine, still, except that ever and again he whispered to himself some precious phrase that had stuck in his mind.

"If," he whispered, "if only we could pick that lock. . . ."

The sun was sinking over the distant hills. Already it was shorn of its beams, a globe of ruddy gold, hanging over the great banks of cloud that would presently engulf it.

"Eh!" said the youngster. "Eh!"

He seemed to wake up at last out of his entrancement, and the red sun was there before his eyes. He stared at it, at first without intelligence and then with a gathering recognition. Into his mind came a strange echo of that ancestral fancy, that fancy of a Stone Age savage, dead and scattered bones among the drift two hundred thousand years ago.

"Ye auld thing," he said—and his eyes were shining, and he made a kind of grabbing gesture with his hand; "ye auld red thing. . . . We'll have ye *yet*."

CHAPTER ONE

THE NEW SOURCE OF ENERGY

§ 1

THE problem which was already being mooted by such scientific men as Ramsay, Rutherford, and Soddy in the very beginning of the twentieth century, the problem of inducing radio-activity in the heavier elements and so tapping the internal energy of atoms, was solved by a wonderful combination of induction, intuition and luck by Holsten so soon as the year 1933. From the first detection of radio-activity to its first subjugation to human purpose measured little more than a quarter of a century. For twenty years after that, indeed, minor difficulties prevented any striking practical application of his success, but the essential thing was done, this new boundary in the march of human progress was crossed, in that year. He set up atomic disintegration in a minute particle of bismuth ; it exploded with great violence into a heavy gas of extreme radio-activity, which disintegrated in its turn in the course of seven days ; and it was only after another year's work that he was able to show practically that the last result of this rapid release of energy was gold. But the thing was done—at the cost of a blistered chest and an injured finger, and from the moment when the invisible speck of bismuth flashed into riving and rending energy, Holsten knew that he had opened a way for mankind, however narrow and dark it might still be, to worlds of limitless power. He recorded as much in the strange diary biography he left the world, a diary that was up to that particular moment a mass of speculations and calculations, and which suddenly became for a space an amazingly minute and human record of sensations and emotions that all humanity might understand.

He gives, in broken phrases and often single words, it is true, but none the less vividly for that, a record of the twenty-four hours following the demonstration of the correctness of his intricate tracery of computations and guesses. "I thought I should not sleep," he writes—the words he omitted are supplied in parentheses—(on account of) "pain in (the) hand and chest and (the) wonder of what I had done. . . . Slept like a child."

He felt strange and disconcerted the next morning ; he had nothing to do, he was living alone in apartments in Bloomsbury, and he decided to go up to Hampstead Heath, which he had known when he was a little boy as a breezy playground. He went up by the underground tube that was then the recognised means of travel from one part of London to another,

and walked up Heath Street from the tube station to the open heath. He found it a gully of planks and scaffoldings between the hoardings of house-wreckers. The spirit of the times had seized upon that narrow, steep, and winding thoroughfare, and was in the act of making it commodious and interesting according to the remarkable ideals of Neo-Georgian æstheticism. Such is the illogical quality of humanity that Holsten, fresh from work that was like a petard under the seat of current civilisation, saw these changes with regret. He had come up Heath Street perhaps a thousand times, had known the windows of all the little shops, spent hours in the vanished cinematograph theatre, and marvelled at the high-flung early Georgian houses upon the westward bank of that old gully of a thoroughfare; he felt strange with these remembered things gone. He escaped at last with a feeling of relief from this choked alley of trenches and holes and cranes, and emerged upon the old familiar scene about the White Stone Pond. That, at least, was very much as it used to be.

There were still the fine old red-brick houses to left and right of him; the reservoir had been improved by a portico of marble, the white-fronted inn with the clustering flowers above its porch still stood out at the angle of the ways, and the blue view to Harrow Hill and Harrow spire, a view of hills and trees and shining waters and wind-driven cloud shadows, was like the opening of a great window to the ascending Londoner. All that was very reassuring. There was the same strolling crowd, the same perpetual miracle of motors dodging through it harmlessly, escaping headlong into the country from the Sabbatical stuffiness behind and below them. There was a band still, a women's suffrage meeting—for the suffrage women had won their way back to the tolerance, a trifle derisive, of the populace again—Socialist orators, politicians, a band, and the same wild uproar of dogs, frantic with the gladness of their one blessed weekly release from the back yard and the chain. And away along the road to the Spaniards strolled a vast multitude, saying as ever that the view of London was exceptionally clear that day.

Young Holsten's face was white. He walked with that uneasy affectation of ease that marks an over-strained nervous system and an under-exercised body. He hesitated at the White Stone Pond whether to go to the left of it or the right, and again at the fork of the roads. He kept shifting his stick in his hand, and every now and then he would get in the way of people on the footpath or be jostled by them because of the uncertainty of his movements. He felt, he confesses, "inadequate to ordinary existence." He seemed to himself to be something inhuman and mischievous. All the people about him looked fairly prosperous, fairly happy, fairly well adapted to the lives they had to lead—a week of work and

a Sunday of best clothes and mild promenading—and he had launched something that would disorganise the entire fabric that held their contentments and ambitions and satisfactions together. "Felt like an imbecile who has presented a box full of loaded revolvers to a Crêche," he notes.

He met a man named Lawson, an old schoolfellow, of whom history now knows only that he was red-faced and had a terrier. He and Holsten walked together, and Holsten was sufficiently pale and jumpy for Lawson to tell him he overworked and needed a holiday. They sat down at a little table outside the County Council house of Golders Hill Park and sent one of the waiters to the Bull and Bush for a couple of bottles of beer, no doubt at Lawson's suggestion. The beer warmed Holsten's rather dehumanised system. He began to tell Lawson as clearly as he could to what his great discovery amounted. Lawson feigned attention, but indeed he had neither the knowledge nor the imagination to understand. "In the end, before many years are out, this must eventually change war, transit, lighting, building, and every sort of manufacture, even agriculture, every material human concern——"

Then Holsten stopped short. Lawson had leapt to his feet. "Damn that dog!" cried Lawson. "Look at it now. Hi! Here! *Phewoo—phewoo—phewoo!* Come *here*, Bobs! Come *here*!"

The young man of science with his bandaged hand sat at the green table, too tired to convey the wonder of the thing he had sought so long, his friend whistled and bawled for his dog, and the Sunday people drifted about them through the spring sunshine. For a moment or so Holsten stared at Lawson in astonishment, for he had been too intent upon what he had been saying to realise how little Lawson had attended.

Then he remarked, "*Well!*" and smiled faintly and—finished the tankard of beer before him.

Lawson sat down again. "One must look after one's dog," he said with a note of apology. "What was it you were telling me?"

§ 2

In the evening Holsten went out again. He walked to Saint Paul's Cathedral and stood for a time near the door listening to the evening service. The candles upon the altar reminded him in some odd way of the fireflies at Fiesole. Then he walked back through the evening lights to Westminster. He was oppressed, he was indeed scared, by his sense of the immense consequences of his discovery. He had a vague idea that night that he ought not to publish his results, that they were premature, that some secret association of wise men should take care of his work and hand it on from generation

to generation until the world was riper for its practical application. He felt that nobody in all the thousands of people he passed had really awakened to the fact of change, they trusted the world for what it was, not to alter too rapidly, to respect their trusts, their assurances, their habits, their little accustomed traffics and hard-won positions.

He went into the embankment gardens beneath the overhanging brightly lit masses of the Savoy Hotel and the Hotel Cecil. He sat down on a seat and became aware of the talk of the two people next to him. It was the talk of a young couple evidently on the eve of marriage. The man was congratulating himself on having regular employment at last; "they like me," he said, "and I like the job. If I work up—in'r dozen years or so I ought to be gettin' somethin' pretty comfortable. That's the plain sense of it, Hetty. There ain't no reason whatsoever why we shouldn't get along very decently—very decently indeed."

The desire for little successes amidst conditions securely fixed! So it struck upon Holsten's mind. He added in his diary, "I had a sense of all this globe as that. . . ."

By that phrase he meant a kind of clairvoyant vision of this populated world as a whole, of all its cities and towns and villages, its highroads and the inns beside them, its gardens and farms and upland pastures, its boatmen and sailors, its ships coming along the great circles of the ocean, its time-tables and appointments and payments and dues as it were one unified and progressive spectacle. Sometimes such visions came to him; his mind, accustomed to great generalisations and yet acutely sensitive to detail, saw things far more comprehensively than the minds of most of his contemporaries. Usually the teeming sphere moved on to its predestined ends and circled with a stately swiftness on its path about the sun. Usually it was all a living progress that altered under his regard. But now fatigue a little deadened him to that incessancy of life, it seemed now just an eternal circling. He lapsed to the commoner persuasion of the great fixities and recurrencies of the human routine. The remoter past of wandering savagery, the inevitable changes of to-morrow were veiled, and he saw only day and night, seed-time and harvest, loving and begetting, births and deaths, walks in the summer sunlight and tales by the winter fireside, the ancient sequence of hope and acts and age perennially renewed, eddying on for ever and ever, save that now the impious hand of research was raised to overthrow this drowsy, gently humming, habitual, sunlit spinning-top of man's existence. . . .

For a time he forgot wars and crimes and hates and persecutions, famine and pestilence, the cruelties of beasts, weariness and the bitter wind, failure and insufficiency and retrocession. He saw all mankind in terms of the humble Sunday couple upon the seat beside him, who schemed their

inglorious outlook and improbable contentments. "I had a sense of all this globe as that."

His intelligence struggled against this mood and struggled for a time in vain. He reassured himself against the invasion of this disconcerting idea that he was something strange and inhuman, a loose wanderer from the flock returning with evil gifts from his sustained unnatural excursions amidst the darknesses and phosphorescences beneath the fair surfaces of life. Man had not been always thus; the instincts and desires of the little home, the little plot, was not all his nature; also he was an adventurer, an experimenter, an unresting curiosity, an insatiable desire. For a few thousand generations indeed he had tilled the earth and followed the seasons, saying his prayers, grinding his corn and trampling the October winepress, yet not for so long but that he was still full of restless stirrings. . . .

"If there have been home and routine and the field," thought Holsten, "there have also been wonder and the sea."

He turned his head and looked up over the back of the seat at the great hotels above him, full of softly shaded lights and the glow and colour and stir of feasting. Might his gift to mankind mean simply more of that? . . .

He got up and walked out of the garden, surveyed a passing tramcar, laden with warm light, against the deep blues of evening, dripping and trailing long skirts of shining reflection; he crossed the Embankment and stood for a time watching the dark river and turning ever and again to the lit buildings and bridges. His mind began to scheme conceivable replacements of all those clustering arrangements. . . .

"It has begun," he writes in the diary in which these things are recorded. "It is not for me to reach out to consequences I cannot foresee. I am a part, not a whole; I am a little instrument in the armoury of Change. If I were to burn all these papers, before a score of years had passed some other man would be doing this. . . ."

§ 3

Holsten, before he died, was destined to see atomic energy dominating every other source of power, but for some years yet a vast network of difficulties in detail and application kept the new discovery from any effective invasion of ordinary life. The path from the laboratory to the workshop is sometimes a tortuous one; electromagnetic radiations were known and demonstrated for twenty years before Marconi made them practically available, and in the same way it was twenty years before induced radio-activity could be brought to practical utilisation. The thing of course was discussed very much, more perhaps at the time of its discovery than during the interval of technical adaptation, but with very little realisa-

tion of the huge economic revolution that impended. What chiefly impressed the journalists of 1933 was the production of gold from bismuth and the realisation albeit upon unprofitable lines of the alchemist's dreams; there was a considerable amount of discussion and expectation in that more intelligent section of the educated publics of the various civilised countries which followed scientific development; but for the most part the world went about its business—as the inhabitants of those Swiss villages which live under the perpetual threat of overhanging rocks and mountains go about their business—just as though the possible was impossible, as though the inevitable was postponed for ever because it was delayed.

It was in 1953 that the first Holsten-Roberts engine brought induced radio-activity into the sphere of industrial production, and its first general use was to replace the steam-engine in electrical generating stations. Hard upon the appearance of this came the Dass-Tata engine—the invention of two among the brilliant galaxy of Bengali inventors the modernisation of Indian thought was producing at this time—which was used chiefly for automobiles, aeroplanes, water-planes, and suchlike mobile purposes. The American Kemp engine, differing widely in principle but equally practicable, and the Krupp-Erlanger came hard upon the heels of this, and by the autumn of 1954 a gigantic replacement of industrial methods and machinery was in progress all about the habitable globe. Small wonder was this when the cost, even of these earliest and clumsiest of atomic engines, is compared with that of the power they superseded. Allowing for lubrication the Dass-Tata engine, once it was started, cost a penny to run thirty-seven miles, and added only nine and a quarter pounds to the weight of the carriage it drove. It made the heavy alcohol-driven automobile of the time ridiculous in appearance as well as preposterously costly. For many years the price of coal and every form of liquid fuel had been clambering to levels that made even the revival of the draft horse seem a practicable possibility, and now with the abrupt relaxation of this stringency the change in appearance of the traffic upon the world's roads was instantaneous. In three years the frightful armoured monsters that had hooted and smoked and thundered about the world for four awful decades were swept away to the dealers in old metal, and the highways thronged with light and clean and shimmering shapes of silvered steel. At the same time a new impetus was given to aviation by the relatively enormous power for weight of the atomic engine, it was at last possible to add Redmayne's ingenious helicopter ascent and descent engine to the vertical propeller that had hitherto been the sole driving force of the aeroplane without overweighting the machine, and men found themselves possessed of an instrument of flight that could hover or ascend or descend vertically and gently as well as rush wildly through

the air. The last dread of flying vanished. As the journalists of the time phrased it, this was the epoch of the Leap into the Air. The new atomic aeroplane became indeed a mania; every one of means was frantic to possess a thing so controllable, so secure and so free from the dust and danger of the road, and in France alone in the year 1943 thirty thousand of these new aeroplanes were manufactured and licensed, and soared humming softly into the sky.

And with an equal speed atomic engines of various types invaded industrialism. The railways paid enormous premiums for priority in the delivery of atomic traction engines, atomic smelting was embarked upon so eagerly as to lead to a number of disastrous explosions due to inexperienced handling of the new power, and the revolutionary cheapening of both materials and electricity made the entire reconstruction of domestic buildings a matter merely dependent upon a reorganisation of the methods of the builder and the house-furnisher. Viewed from the side of the new power and from the point of view of those who financed and manufactured the new engines and material it required, the age of the Leap into the Air was one of astonishing prosperity. Patent-holding companies were presently paying dividends of five or six hundred per cent. and enormous fortunes were made and fantastic wages earned by all who were concerned in the new developments. This prosperity was not a little enhanced by the fact that in both the Dass-Tata and Holsten-Roberts engines one of the recoverable waste products was gold—the former disintegrated dust of bismuth and the latter dust of lead—and that this new supply of gold led quite naturally to a rise in prices throughout the world.

This spectacle of feverish enterprise, this vast productivity, this crowding flight of happy and fortunate rich people—every great city was as if a crawling ant-hill had suddenly taken wing—was the bright side of the opening phase of the new epoch in human history. Beneath that brightness was a gathering darkness, a deepening dismay. If there was a vast development of production there was also a huge destruction of values. These glaring factories working night and day, these glittering new vehicles swinging noiselessly along the roads, these flights of dragon-flies that swooped and soared and circled in the air, were indeed no more than the brightnesses of lamps and fires that gleam out when the world sinks towards twilight and the night. Between these high lights accumulated disaster, social catastrophe. The coal-mines were manifestly doomed to closure at no very distant date, the vast amount of capital invested in oil was becoming unsaleable, millions of coal-miners, steel workers upon the old lines, vast swarms of unskilled or under-skilled labourers in innumerable occupations were being flung out of employment by the superior efficiency of the new machinery, the rapid fall in the

cost of transit was destroying high land values at every centre of population, the value of existing house property had become problematical, gold was undergoing headlong depreciation, all the securities upon which the credit of the world rested were slipping and sliding, banks were tottering, the stock exchanges were scenes of feverish panic ;—this was the reverse of the spectacle, these were the black and monstrous under-consequences of the Leap into the Air.

There is a story of a demented London stockbroker running out into Threadneedle Street and tearing off his clothes as he ran. "The Steel Trust is scrapping the whole of its plant," he shouted. "The State Railways are going to scrap all their engines. Everything's going to be scrapped—everything. Come and scrap the mint, you fellows, come and scrap the mint!"

In the year 1955 the suicide rate for the United States of America quadrupled any previous record. There was an enormous increase also in violent crime throughout the world. The thing had come upon an unprepared humanity ; it seemed as though human society was to be smashed by its own magnificent gains.

For there had been no foresight of these things. There had been no attempt anywhere even to compute the probable dislocations this flood of inexpensive energy would produce in human affairs. The world in these days was not really governed at all, in the sense in which government came to be understood in subsequent years. Government was a treaty, not a design ; it was forensic, conservative, disputatious, unseeing, unthinking, uncreative ; throughout the world, except where the vestiges of absolutism still sheltered the court favourite and the trusted servant, it was in the hands of the predominant caste of lawyers, who had an enormous advantage in being the only trained caste. Their professional education and every circumstance in the manipulation of the fantastically naïve electoral methods by which they clambered to power, conspired to keep them contemptuous of facts, conscientiously unimaginative, alert to claim and seize advantages and suspicious of every generosity. Government was an obstructive business of energetic factions, progress went on outside of and in spite of public activities, and legislation was the last crippling recognition of needs so clamorous and imperative and facts so aggressively established as to invade even the dingy seclusions of the judges and threaten the very existence of the otherwise inattentive political machine.

The world was so little governed that with the very coming of plenty, in the full tide of an incalculable abundance, when everything necessary to satisfy human needs and everything necessary to realise such will and purpose as existed then in human hearts was already at hand, one has still to tell of hardship, famine, anger, confusion, conflict, and incoherent suffer-

ing. There was no scheme for the distribution of this vast new wealth that had come at last within the reach of men ; there was no clear conception that any such distribution was possible. As one attempts a comprehensive view of those opening years of the new age, as one measures it against the latent achievement that later years have demonstrated, one begins to measure the blindness, the narrowness, the insensate unimaginative individualism of the preatomic time. Under this tremendous dawn of power and freedom, under a sky ablaze with promise, in the very presence of science standing like some bountiful goddess over all the squat darknesses of human life, holding patiently in her strong arms, until men chose to take them, security, plenty, the solution of riddles, the key of the bravest adventures, in her very presence, and with the earnest of her gifts in court, the world was to witness such things as the squalid spectacle of the Dass-Tata patent litigation.

There in a stuffy court in London, a grimy oblong box of a room, during the exceptional heat of the May of 1956, the leading counsel of the day argued and shouted over a miserable little matter of more royalites or less and whether the Dass-Tata company might not bar the Holsten-Roberts' methods of utilising the new power. The Dass-Tata people were indeed making a strenuous attempt to secure a world monopoly in atomic engineering. The judge, after the manner of those times, sat raised above the court, wearing a preposterous gown and a foolish huge wig, the counsel also wore dirty-looking little wigs and queer black gowns over their usual costume, wigs and gowns that were held to be necessary to their pleading, and upon unclean wooden benches stirred and whispered artful-looking solicitors, busily scribbling reporters, the parties to the case, expert witnesses, interested people, and a jostling confusion of subpœnaed persons, briefless young barristers (forming a style on the most esteemed and truculent examples) and casual eccentric spectators who preferred this pit of iniquity to the free sunlight outside. Every one was damply hot, the examining King's Counsel wiped the perspiration from his huge, cleanshaven upper lip, and into this atmosphere of grasping contention and human exhalations the daylight filtered through a window that was manifestly dirty. The jury sat in a double pew to the left of the judge, looking as uncomfortable as frogs that have fallen into an ash-pit, and in the witness-box lied the would-be omnivorous Dass, under cross-examination. . . .

Holsten had always been accustomed to publish his results so soon as they appeared to him to be sufficiently advanced to furnish a basis for further work, and to that confiding disposition and one happy flash of adaptive invention the alert Dass owed his claim. . . .

But indeed a vast multitude of such sharp people were

clutching, patenting, pre-empting, monopolising this or that feature of the new development, seeking to subdue this gigantic winged power to the purposes of their little lusts and avarice. That trial is just one of innumerable disputes of the same kind. For a time the face of the world festered with patent legislation. It chanced however to have one oddly dramatic feature in the fact that Holsten, after being kept waiting about the court for two days as a beggar might have waited at a rich man's door, after being bullied by ushers and watched by policemen, was called as a witness, rather severely handled by counsel, and told not to " quibble " by the judge when he was trying to be absolutely explicit.

The judge scratched his nose with a quill pen, and sneered at Holsten's astonishment round the corner of his monstrous wig. Holsten was a great man, was he ? Well, in a law-court great men were put in their places.

" We want to know has the plaintiff added anything to this or hasn't he ? " said the judge, " we don't want to have your views whether Sir Philip Dass's improvements were merely superficial adaptations or whether they were implicit in your paper. No doubt—after the manner of inventors—you think most things that were ever likely to be discovered are implicit in your papers. No doubt also you think too that most subsequent additions and modifications are merely superficial. Inventors have a way of thinking that. The law isn't concerned with that sort of thing. The law has nothing to do with the vanity of inventors. The law is concerned with the question whether these patent rights have the novelty the plaintiff claims for them. What that admission may or may not stop, and all these other things you are saying in your overflowing zeal to answer more than the questions addressed to you—none of these things have anything whatever to do with the case in hand. It is a matter of constant astonishment to me in this court to see how you scientific men, with all your extraordinary claims to precision and veracity, wander and wander so soon as you get into the witness-box. I know no more unsatisfactory class of witness. The plain and simple question is, has Sir Philip Dass made any real addition to existing knowledge and methods in this matter or has he not ? We don't want to know whether they were large or small additions nor what the consequences of your admission may be. That you will leave to us."

Holsten was silent.

" Surely ? " said the judge almost pityingly.

" No, he hasn't," said Holsten, perceiving that for once in his life he must disregard infinitesimals.

" Ah ! " said the judge. " Now why couldn't you say that when counsel put the question ? . . ."

An entry in Holsten's diary-autobiography, dated five days later, runs : " Still amazed. The law is the most dangerous

thing in this country. It is hundreds of years old. It hasn't an idea. The oldest of old bottles and this new wine, the most explosive wine. Something will overtake them."

§ 4

There was a certain truth in Holsten's assertion that the law was "hundreds of years old." It was, in relation to current thought and widely accepted ideas, an archaic thing. While almost all the material and methods of life had been changing rapidly and were now changing still more rapidly, the law-courts and the legislatures of the world were struggling desperately to meet modern demands with devices and procedures, conceptions of rights and property and authority and obligation that dated from the rude compromises of relatively barbaric times. The horsehair wigs and antic dresses of the British judges, their musty courts and overbearing manners, were indeed only the outward and visible intimations of profounder anachronisms. The legal and political organisation of the earth in the middle twentieth century was indeed everywhere like a complicated garment, outworn yet strong, that now fettered the governing body that once it had protected.

Yet that same spirit of free-thinking and outspoken publication that in the field of natural science had been the beginning of the conquest of nature, was at work throughout all the eighteenth and nineteenth centuries preparing the spirit of the new world within the degenerating body of the old. The idea of a greater subordination of individual interests and established institutions to the collective future is traceable more and more clearly in the literature of those times, and movement after movement fretted itself away in criticism of and opposition to first this aspect and then that of the legal, social, and political order. Already in the early nineteenth century Shelley, with no scrap of alternative, is denouncing the established rulers of the world as Anarchs, and the entire system of ideas and suggestions that was known as Socialism, and more particularly its international side, feeble as it was in creative proposals or any method of transition, still witnesses to the growth of a conception of a modernised system of interrelationships that should supplant the existing tangle of proprietary legal ideas.

The word "Sociology" was invented by Herbert Spencer, a popular writer upon philosophical subjects who flourished about the middle of the nineteenth century, but the idea of a state, planned as an electric traction system is planned, without reference to pre-existing apparatus, upon scientific lines, did not take a very strong hold upon the popular imagination of the world until the twentieth century. Then the growing impatience of the American people with the monstrous

and socially paralysing party systems that had sprung out of their absurd electoral arrangements, led to the appearance of what came to be called the "Modern State" movement, and a galaxy of brilliant writers, in America, Europe, and the East, stirred up the world to the thought of bolder rearrangements of social interaction, property, employment, education, and government, than had ever been contemplated before. No doubt these Modern State ideas were very largely the reflection upon social and political thought of the vast revolution in material things that had been in progress for two hundred years, but for a long time they seemed to be having no more influence upon existing institutions than the writings of Rousseau and Voltaire seemed to have had at the time of the death of the latter. They were fermenting in men's minds, and it needed only just such social and political stresses as the coming of the atomic mechanisms brought about to thrust them forward abruptly into crude and startling realisation.

§ 5

Frederick Barnet's Wanderjahre is one of those autobiographical novels that were popular throughout the third and fourth decades of the twentieth century. It was published in 1970 and one must understand Wanderjahre rather in a spiritual and intellectual than in a literal sense. It is indeed an allusive title carrying the world back to the "Wilhelm Meister" of Goethe, a century and a half earlier.

Its author, Frederick Barnet, gives a minute and curious history of his life and ideas between his nineteenth and his twenty-third birthdays. He was neither a very original nor a very brilliant man, but he had a trick of circumstantial writing; and though no authentic portrait was to survive for the information of posterity, he betrays by a score of casual phrases that he was short, sturdy, inclined to be plump, with a "rather blobby" face, and full, rather projecting blue eyes. He belonged until the financial débâcle of 1956 to the class of fairly prosperous people, he was a student in London, he aeroplaned to Italy and then had a pedestrian tour from Genoa to Rome, crossed in the air to Greece and Egypt and came back over the Balkans and Germany. His family fortunes, which were largely invested in bank shares, coal-mines, and house property, were destroyed. Reduced to penury, he sought to earn a living. He suffered great hardship, and was then caught up by the war and had a year of soldiering, first as an officer in the English infantry and then in the army of pacification. His book tells all these things so simply and at the same time so explicitly that it remains as it were an eye by which future generations may have at least one man's vision of the years of the Great Change.

And he was, he tells us, a "Modern State" man "by

instinct" from the beginning. He breathed in these ideas in the classrooms and laboratories of the Carnegie Foundation school that rose, a long and delicately beautiful façade, along the south bank of the Thames opposite the ancient dignity of Somerset House. Such thought was interwoven with the very fabric of that pioneer school in the educational renascence in England. After the customary exchange years in Heidelberg and Paris, he went into the classical school of London University. The older so called "classical" education of the British pedagogues, probably the most paralysing, ineffective, and foolish routine that ever wasted human life, had already been swept out of this great institution in favour of modern methods, and he learned Greek and Latin as well as he had learned German, Spanish, and French, so that he wrote and spoke them freely and used them with an unconscious ease in his study of the foundation civilisations of the European system to which they were the key. (This change was still so recent that he mentions an encounter in Rome with an "Oxford don" who "spoke Latin with a Wiltshire accent and manifest discomfort, wrote Greek letters with his tongue out, and seemed to think a Greek sentence a charm when it was a quotation and an impropriety when it wasn't.")

Barnet saw the last days of the coal-steam engines upon the English railways and the gradual cleansing of the London atmosphere as the smoke-creating sea-coal fires gave place to electric heating. The building of laboratories at Kensington was still in progress and he took part in the students' riots that delayed the removal of the Albert Memorial. He carried a banner with "We like Funny Statuary" on one side and on the other "Seats and Canopies for Statues, Why should our Great Departed Stand in the Rain?" He learned the rather athletic aviation of those days at the university grounds at Sydenham, and he was fined for flying over the new prison for political libellers at Wormwood Scrubs, "in a manner calculated to exhilarate the prisoners while at exercise." That was the time of the attempted suppression of any criticism of the public judicature, and the place was crowded with journalists who had ventured to call attention to the dementia of Chief-Justice Abrahams. Barnet was not a very good aviator, he confesses he was always a little afraid of his machine—there was excellent reason for every one to be afraid of those clumsy early types—and he never attempted steep descents or very high flying. He also, he records, owned one of those oil-driven motor-bicycles whose clumsy complexity and extravagant filthiness still astonish the visitors to the museum of machinery at South Kensington. He mentions running over a dog and complains of the ruinous price of "spatchcocks" in Surrey. "Spatchcocks," it seems, was a slang term for crushed hens.

He passed the examinations necessary to reduce his military

service to a minimum, and his want of any special scientific or technical qualification and a certain precocious corpulence that handicapped his aviation indicated the infantry of the line as his sphere of training. That was the most generalised form of soldiering. The development of the theory of war had been for some decades but little assisted by any practical experience. What fighting had occurred in recent years had been fighting in minor or uncivilised states, with peasant or barbaric soldiers and with but a small equipment of modern contrivances, and the great powers of the world were content for the most part to maintain armies that sustained in their broader organisation the traditions of the European wars of thirty and forty years earlier. There was the infantry arm to which Barnet belonged and which was supposed to fight on foot with a rifle and be the main portion of the army. There were cavalry forces (horse soldiers), having a ratio to the infantry that had been determined by the experiences of the Franco-German War in 1871. There was also artillery, and for some unexplained reason much of this was still drawn by horses; though there were also in all the European armies a small number of motor-guns with wheels so constructed that they could go over broken ground. In addition there were large developments of the engineering arm, concerned with motor transport, motor-bicycle scouting, aviation, and the like.

No first-class intelligence had been sought to specialise in and work out the problem of warfare with the new appliances and under modern conditions, but a succession of able jurists, Lord Haldane, Chief-Justice Briggs, and that very brilliant King's Counsel Philbrick, had reconstructed the army frequently and thoroughly and placed it at last, with the adoption of national service, upon a footing that would have seemed very imposing to the public of 1900. At any moment the British Empire could now put a million and a quarter of arguable soldiers upon the board of Welt-Politik. The traditions of Japan and the central European armies were more princely and less forensic; the Chinese still refused resolutely to become a military power and maintained a small standing army upon the American model that was said, so far as it went, to be highly efficient, and Russia, secured by a stringent administration against internal criticism, had scarcely altered the design of a uniform or the organisation of a battery since the opening decades of the century. Barnet's opinion of his military training was manifestly a poor one, his Modern State ideas disposed him to regard it as a bore and his common sense condemned it as useless. Moreover his habit of body made him peculiarly sensitive to the fatigues and hardships of service.

"For three days in succession we turned out before dawn and—for no earthly reason—without breakfast," he relates.

"I suppose that is to show us that when the Day comes the first thing will be to get us thoroughly uncomfortable and rotten. We then proceeded to Kriegspiel according to the mysterious ideas of those in authority over us. On the last day we spent three hours under a hot if early sun getting over eight miles of country to a point we could have reached in a motor omnibus in nine minutes and a half—I did it the next day in that—and then we made a massed attack upon entrenchments that could have shot us all about three times over if only the umpires had let them. Then came a little bayonet exercise, but I doubt if I am sufficiently a barbarian to stick this long knife into anything living. Anyhow in this battle I shouldn't have had a chance. Assuming that by some miracle I hadn't been shot three times over, I was far too hot and blown when I got up to the entrenchments even to lift my beastly rifle. It was those others would have begun the sticking. . . .

"For a time we were watched by two hostile aeroplanes; then our own came up and asked them not to, and—the practice of aerial warfare still being unknown—they very politely desisted and went away and did dives and circles of the most charming description over the Fox Hills."

All Barnet's accounts of his military training were written in the same half-contemptuous, half-protesting tone. He was of opinion that his chances of participating in any real warfare were very slight, and that, if after all he should participate, it was bound to be so entirely different from these peace manœuvres that his only course as a rational man would be to keep as observantly out of danger as he could until he had learned the tricks and possibilities of the new conditions. He states this quite frankly. Never was a man more free from sham heroics.

§ 6

Barnet welcomed the appearance of the atomic engine with the zest of masculine youth in all fresh machinery, and it is evident that for some time he failed to connect the rush of wonderful new possibilities with the financial troubles of his family. "I knew my father was worried," he admits. That cast the smallest of shadows upon his delighted departure for Italy and Greece and Egypt with three congenial companions in one of the new atomic models. They flew over the Channel Isles and Touraine, he mentions, and circled about Mont Blanc—"These new helicopters, we found," he notes, "had abolished all the danger and strain of sudden drops to which the old-time aeroplanes were liable"—and then he went on by way of Pisa, Pæstum, Ghirgenti, and Athens to visit the Pyramids by moonlight, flying thither from Cairo, and to follow the Nile up to Khartoum. Even by later standards it must have been a very gleeful holiday for a young

man, and it made the tragedy of his next experiences all the darker. A week after his return his father, who was a widower, announced himself ruined, and committed suicide by means of an unscheduled opiate.

At one blow Barnet found himself flung out of the possessing, spending, enjoying class to which he belonged, penniless and with no calling by which he could earn a living. He tried teaching and some journalism, but in a little while he found himself on the underside of a world in which he had always reckoned to live in the sunshine. For innumerable men such an experience has meant mental and spiritual destruction, but Barnet, in spite of his bodily gravitation towards comfort, showed himself, when put to the test, of the more valiant modern quality. He was saturated with the creative stoicism of the heroic times that were already dawning, and he took his difficulties and discomforts stoutly as his appointed material, and turned them to expression.

Indeed, in his book he thanks fortune for them. "I might have lived and died," he says, "in that neat fool's paradise of secure lavishness above there. I might never have realised the gathering wrath and sorrow of the ousted and exasperated masses. In the days of my own prosperity things had seemed to me to be very well arranged." Now from his new point of view he was to find they were not arranged at all; that government was a compromise of aggressions and powers and lassitudes, and law a convention between interests, and that the poor and the weak though they had many negligent masters had few friends.

"I had thought things were looked after," he wrote. "It was with a kind of amazement that I tramped the roads and starved—and found that no one in particular cared."

He was turned out of his lodging in a backward part of London.

"It was with difficulty I persuaded my landlady—she was a needy widow, poor soul, and I was already in her debt—to keep an old box for me in which I had locked a few letters, keepsakes, and the like. She lived in great fear of the Public Health and Morality Inspectors because she was sometimes too poor to pay the customary tip to them, but at last she consented to put it in a dark tiled place under the stairs, and then I went forth into the world—to seek first the luck of a meal and then shelter."

He wandered down into the thronging gayer parts of London in which a year or so ago he had been numbered among the spenders.

London under the Visible Smoke Law, by which any production of visible smoke with or without excuse was punishable by a fine, had already ceased to be the sombre, smoke-darkened city of the Victorian time; it had been and indeed was constantly being rebuilt, and its main streets were already be-

ginning to take on those characteristics that distinguished them throughout the latter half of the twentieth century. The insanitary horse and the plebeian bicycle had been banished from the roadway, which was now of a resilient glass-like surface, spotlessly clean ; and the foot passenger was restricted to a narrow vestige of the ancient footpath on either side of the track and forbidden at the risk of a fine, if he survived, to cross the roadway. People descended from their automobiles upon this pavement and went through the lower shops to the lifts and stairs to the new ways for pedestrians, the Rows, that ran along the front of the houses at the level of the first story and, being joined by frequent bridges, gave the newer parts of London a curiously Venetian appearance. In some streets there were upper and even third-storey Rows. For most of the day and all night the shop windows were lit by electric light, and many establishments had made as it were canals of public footpaths through their premises in order to increase their window space.

Barnet made his way along this night-scene rather apprehensively since the police had power to challenge and demand the Labour Card of any indigent-looking person, and if the record failed to show he was in employment dismiss him to the traffic pavement below.

But there was still enough of his former gentility about Barnet's appearance and bearing to protect him from this ; the police, too, had other things to think of that night, and he was permitted to reach the galleries about Leicester Square—that great focus of London life and pleasure.

He gives a vivid description of the scene that evening. In the centre was a garden raised on arches lit by festoons of lights and connected with the Rows by eight graceful bridges, beneath which hummed the interlacing streams of motor traffic, pulsating as the current alternated between east and west and north and south. Above rose great frontages of intricate rather than beautiful reinforced porcelain, studded with lights, barred by bold illuminated advertisements, and glowing with reflections. There were the two historical music-halls of this place, the Shakespeare Memorial Theatre, in which the municipal players revolved perpetually through the cycle of Shakespeare's plays, and four other great houses of refreshment and entertainment whose pinnacles streamed up into the blue obscurity of the night. The south side of the square was in dark contrast to the others ; it was still being rebuilt, and a lattice of steel bars surmounted by the frozen gestures of monstrous cranes rose over the excavated sides of vanished Victorian buildings.

This framework attracted Barnet's attention for a time to the exclusion of other interests. It was absolutely still, it had a dead rigidity, a stricken inaction, no one was at work upon it and all its machinery was quiet ; but the constructors'

globes of vacuum light filled its every interstice with a quivering green moonshine and showed alert but motionless—soldier sentinels!

He questioned a passing stroller, and was told that the men had struck that day against the use of an atomic riveter that would have doubled the individual efficiency and halved the number of steel workers.

"Shouldn't wonder if they didn't get chucking bombs," said Barnet's informant, hovered for a moment, and then went on his way to the Alhambra music-hall.

Barnet became aware of an excitement in the newspaper kiosks at the corners of the square. Something very sensational had been flashed upon the transparencies. Forgetting for a moment his penniless condition he made his way over a bridge to buy a paper, for in those days the papers, which were printed upon thin sheets of metallic foil, were sold at determinate points by specially licensed purveyors. Half over he stopped short at a change in the traffic below, and was astonished to see that the police signals were restricting vehicles to the half roadway. When presently he got within sight of the transparencies that had replaced the placards of Victorian times, he read of the Great March of the Unemployed that was already in progress through the West End, and so without expenditure he was able to understand what was coming.

He watched, and his book describes this procession which the police had considered it unwise to prevent and which had been spontaneously organised in imitation of the Unemployed Processions of earlier times. He had expected a mob, but there was a kind of sullen discipline about the procession when at last it arrived. What seemed for a time an unending column of men marched wearily, marched with a kind of implacable futility, along the roadway underneath him. He was, he says, moved to join them, but instead he remained watching. They were a dingy, shabby, ineffective-looking multitude, for the most part incapable of any but obsolete and superseded types of labour. They bore a few banners with the time-honoured inscription: "Work, not Charity," but otherwise their ranks were unadorned.

They were not singing, they were not even talking, there was nothing truculent nor aggressive in their bearing, they had no definite objective, they were just marching and showing themselves in the more prosperous parts of London. They were a sample of that great mass of unskilled cheap labour which the now still cheaper mechanical powers had superseded for evermore. They were being "scrapped"—as horses had been "scrapped."

Barnet leaned over the parapet watching them, his mind quickened by his own precarious condition. For a time, he says, he felt nothing but despair at the sight; what should

be done, what could be done for this gathering surplus of humanity? They were so manifestly useless—and incapable—and pitiful.

What were they asking for?

They had been overtaken by unexpected things. Nobody had foreseen——

It flashed suddenly into his mind just what the multitudinous shambling enigma below meant. It was an appeal against the unexpected, an appeal to those others who, more fortunate, seemed wiser and more powerful, for something—for *intelligence*. This mute mass, weary-footed, rank following rank, protested its persuasion that some of these others must have foreseen these dislocations—that anyhow they ought to have foreseen—and arranged.

That was what this crowd of wreckage was feeling and seeking so dumbly to assert.

"Things came to me like the turning on of a light in a darkened room," he says. "These men were praying to their fellow-creatures as once they prayed to God! The last thing that men will realise about anything is that it is inanimate. They had transferred their animation to mankind. They still believed there was intelligence somewhere, even if it was careless or malignant. . . . It had only to be aroused to be conscience-stricken, to be moved to exertion. . . . And I saw too that as yet *there was no such intelligence*. The world waits for intelligence. That intelligence has still to be made, that will for good and order has still to be gathered together, out of scraps of impulse and wandering seeds of benevolence and whatever is fine and creative in our souls, into a common purpose. It's something still to come. . . ."

It is characteristic of the widening thought of the time that this not very heroic young man who, in any previous age, might well have been altogether occupied with the problem of his own individual necessities, should be able to stand there and generalise about the needs of the race.

But upon all the stresses and conflicts of that chaotic time there was already dawning the light of a new era. The spirit of humanity was escaping, even then it was escaping, from its extreme imprisonment in individuals. Salvation from the bitter intensities of self, which had been a conscious religious end for thousands of years, which men had sought in mortifications, in the wilderness, in meditation and by innumerable strange paths, was coming at last with the effect of naturalness into the talk of men, into the books they read, into their unconscious gestures, into their newspapers and daily purposes and everyday acts. The broad horizons, the magic possibilities that the spirit of the seeker had revealed to them, were charming them out of those ancient and instinctive preoccupations from which the very threat of hell and torment had failed to drive them. And this young man

homeless and without provision even for the immediate hours, in the presence of social disorganisation, distress, and perplexity, in a blazing wilderness of thoughtless pleasure that blotted out the stars, could think as he tells us he thought.

"I saw life plain," he wrote. "I saw the gigantic task before us, and the very splendour of its intricate and immeasurable difficulty filled me with exaltation. I saw that we have still to discover government, that we have still to discover education, which is the necessary reciprocal of government, and that all this—in which my own little speck of a life was so manifestly overwhelmed—this and its yesterday in Greece and Rome and Egypt were nothing, the mere first dust swirls of the beginning, the movements and dim murmurings of a sleeper who will presently be awake. . . ."

§ 7

And then the story tells, with an engaging simplicity, of his descent from this ecstatic vision of reality.

"Presently I found myself again and I was beginning to feel cold and a little hungry."

He bethought himself of the John Burns Relief Offices which stood upon the Thames Embankment. He made his way through the galleries of the booksellers and the National Gallery, which had been open continuously day and night to all decently dressed people now for more than twelve years, and across the rose-gardens of Trafalgar Square, and so by the hotel colonnade to the Embankment. He had long known of these admirable offices, which had swept the last beggars and matchsellers and all the casual indigent from the London streets, and he believed that he would as a matter of course be able to procure a ticket for food and a night's lodging and some indication of possible employment.

But he had not reckoned upon the new labour troubles, and when he got to the Embankment he found the offices hopelessly congested and besieged by a large and rather unruly crowd. He hovered for a time on the outskirts of the waiting multitude, perplexed and dismayed, and then he became aware of a movement, a purposive trickling away of people, up through the arches of the great buildings that had arisen when all the railway stations were removed to the south side of the river, and so to the covered ways of the Strand. And here in the open glare of midnight he found unemployed men begging, and not only begging but begging with astonishing assurance, from the people who were emerging from the small theatres and other such places of entertainment which abounded in that thoroughfare.

This was an altogether unexampled thing. There had been no begging in London streets for a quarter of a century. But

that night the police were evidently unwilling or unable to cope with the destitute who were invading those well-kept quarters of the town. They had become stonily blind to anything but manifest disorder.

Barnet walked through the crowd unable to bring himself to ask ; indeed his bearing must have been more valiant than his circumstances for twice he says that he was begged from. Near the Trafalgar Square gardens, a girl with reddened cheeks and blackened eyebrows who was walking alone spoke to him with a peculiar friendliness.

" I'm starving," he said to her abruptly.

" Oh ! poor dear ! " she said ; and with the impulsive generosity of her kind glanced round and slipped a silver piece into his hand.

It was a gift that, in spite of the precedent of De Quincey, might under the repressive social legislation of those times have brought Barnet within reach of the prison lash. But he took it, he confesses, and thanked her as well as he was able and went off very gladly to get food.

§ 8

A day or so later—and again his freedom to go as he pleased upon the roads may be taken as a mark of increasing social disorganisation and police embarrassment—he wandered out into the open country.

He speaks of the roads of that plutocratic age as being " fenced with barbed wire against unpropertied people," of the high-walled gardens and trespass warnings that kept him to the dusty narrowness of the public ways. In the air, happy rich people were flying, heedless of the misfortunes about them, as he himself had been flying two years ago, and along the road swept the new traffic light and swift and wonderful. One was rarely out of earshot of its whistles and gongs and siren cries even in the field paths or over the open downs. The officials of the labour exchanges were everywhere overworked and infuriated, the casual wards were so crowded that the surplus wanderers slept in ranks under sheds or in the open air, and since giving to wayfarers had been made a punishable offence there was no longer friendship or help for a man from the rare foot passenger or the wayside cottage. . . .

" I wasn't angry," said Barnet. " I saw an immense selfishness, a monstrous disregard for anything but pleasure and possession in all those people above us ; but I saw how inevitable that was, how certainly if the richest had changed places with the poorest, that things would have been the same. What else can happen when men use science and every new thing that science gives and all their available intelligence and energy to manufacture wealth and appliances,

and leave government and education to the rusting traditions of hundreds of years ago? Those traditions come from the dark ages when there was really not enough for every one, when life was a fierce struggle that might be masked but could not be escaped. Of course this famished grabbing, this fierce dispossession of others, must follow from such a disharmony between material and training. Of course the rich were vulgar and the poor grew savage, and every added power that came to men made the rich richer and the poor less necessary and less free. The men I met in the casual wards and the relief offices were all smouldering for revolt, talking of justice and injustice and revenge. I saw no hope in that talk, nor in anything but patience. . . ."

But he did not mean a passive patience. He meant that the method of social reconstruction was still a riddle, that no effectual rearrangement was possible until this riddle in all its tangled aspects was solved. "I tried to talk to those discontented men," he wrote, "but it was hard for them to see things as I saw them. When I talked of patience and the larger scheme, they answered, 'But then we shall all be dead' —and I could not make them see, what is so simple to my own mind, that that did not affect the question. Men who think in lifetimes are of no use to statesmanship."

He does not seem to have seen a newspaper during those wanderings, and a chance sight of the transparency of a kiosk in the market-place at Bishop's Stortford announcing a "Grave International Situation" did not excite him very much. There had been so many grave international situations in recent years.

This time it was talk of the Central European powers suddenly attacking the Slav Confederacy, with France and England going to the help of the Slavs.

But the next night he found a tolerable meal awaiting the vagrants in the casual ward, and learned from the workhouse master that all serviceable trained men were to be sent back on the morrow to their mobilisation centres. The country was on the eve of war. He was to go back through London to Surrey. His first feeling, he records, was one of extreme relief that his days of "hopeless battering at the underside of civilisation" were at an end. Here was something definite to do, something definitely provided for. But his relief was greatly modified when he found that the mobilisation arrangements had been made so hastily and carelessly that for nearly thirty-six hours at the improvised depot at Epsom he got nothing either to eat or to drink but a cup of cold water. The depot was absolutely unprovisioned, and no one was free to leave it.

CHAPTER TWO

THE LAST WAR

§ 1

Viewed from the standpoint of a sane and ambitious social order, it is difficult to understand and it would be tedious to follow the motives that plunged mankind into the war that fills the histories of the middle decades of the twentieth century.

It must always be remembered that the political structure of the world at that time was everywhere extraordinarily behind the collective intelligence. That is the central fact of that history. For two hundred years there had been no great changes in political or legal methods and pretensions, the utmost change had been a certain shifting of boundaries and a slight readjustment of procedure, while in nearly every other aspect of life there had been fundamental revolutions, gigantic releases and an enormous enlargement of scope and outlook. The absurdities of courts and the indignities of representative parliamentary government, coupled with the opening of vast fields of opportunity in other directions, had withdrawn the best intelligences more and more from public affairs. The ostensible governments of the world in the twentieth century were following in the wake of the ostensible religions. They were ceasing to command the services of any but second-rate men. After the middle of the eighteenth century there are no more great ecclesiastics upon the world's memory, after the opening of the twentieth no more statesmen. Everywhere one finds an energetic, ambitious, short-sighted, commonplace type in the seats of authority, blind to the new possibilities and litigiously reliant upon the traditions of the past.

Perhaps the most dangerous of those outworn traditions were the boundaries of the various "sovereign states," and the conception of a general predominance in human affairs on the part of some one particular state. The memory of the empires of Rome and Alexander squatted, an inlaid carnivorous ghost, in the human imagination—it bored into the human brain like some grisly parasite and filled it with disordered thoughts and violent impulses. For more than a century the French system exhausted its vitality in belligerent convulsions, and then the infection passed to the German-speaking peoples who were the heart and centre of Europe, and from them onward to the Slavs. Later ages were to store and neglect the vast insane literature of this obsession, the intricate treaties, the secret agreements, the

infinite knowingness of the political writer, the cunning refusals to accept plain facts, the strategic devices, the tactical manœuvres, the records of mobilisations and counter-mobilisations. It ceased to be credible almost as soon as it ceased to happen, but in the very dawn of the new age their statecraftsmen sat with their historical candles burning, and, in spite of strange new reflections and unfamiliar lights and shadows, still wrangling and planning to rearrange the maps of Europe and the world.

It was to become a matter for subtle inquiry how far the millions of men and women outside the world of these specialists sympathised and agreed with their portentous activities. One school of psychologists inclined to minimise this participation, but the balance of evidence goes to show that there were massive responses to these suggestions of the belligerent schemer. Primitive man had been a fiercely combative animal ; innumerable generations had passed their lives in tribal warfare, and the weight of tradition, the example of history, the ideals of loyalty and devotion fell in easily enough with the incitements of the international mischief-maker. The political ideas of the common man were picked up haphazard, there was practically nothing in such education as he was given that was ever intended to fit him for citizenship as such (that conception appeared indeed only with the development of Modern State ideas) and it was therefore a comparatively easy matter to fill his vacant mind with the sounds and fury of exasperated suspicion and national aggression.

For example, Barnet describes the London crowd as noisily patriotic when presently his battalion came up from the depot to London, to entrain for the French frontier. He tells of children and women and lads and old men cheering and shouting, of the streets and rows hung with the flags of the allied powers, of a real enthusiasm even among the destitute and unemployed. The Labour Bureaux were now partially transformed into enrolment offices and were centres of hotly patriotic excitement. At every convenient place upon the line on either side of the Channel Tunnel there were enthusiastic spectators, and the feeling in the regiment, if a little stiffened and darkened by grim anticipations, was none the less warlike.

But all this emotion was the fickle emotion of minds without established ideas ; it was with most of them, Barnet says, as it was with himself, a natural response to collective movement, and to martial sounds and colours, and the exhilarating challenge of vague dangers. And people had been so long oppressed by the threat of and preparation for war that its arrival came with an effect of positive relief.

§ 2

The plan of campaign of the allies assigned the defence of the lower Meuse to the English, and the troop-trains were run direct from the various British depots to the points in the Ardennes where they were intended to entrench themselves.

Most of the documents bearing upon the campaign were destroyed during the war, from the first the scheme of the allies seems to have been confused, but it is highly probable that the formation of an aerial park in this region, from which attacks could be made upon the vast industrial plant of the lower Rhine, and a flanking raid through Holland upon the German naval establishments at the mouth of the Elbe, were integral parts of the original project. Nothing of this was known to such pawns in the game as Barnet and his company, whose business it was to do what they were told by the mysterious intelligences at the direction of things in Paris, to which city the Whitehall staff had also been transferred. From first to last these directing intelligences remained mysterious to the body of the army, veiled under the name of "Orders." There was no Napoleon, no Cæsar to embody enthusiasm. Barnet says, "We talked of Them. *They* are sending us up into Luxembourg. *They* are going to turn the Central European right."

Behind the veil of this vagueness the little group of more or less worthy men which constituted Headquarters was beginning to realise the enormity of the thing it was supposed to control. . . .

In the great hall of the War Control whose windows looked out across the Seine to the Trocadero and the palaces of the western quarter, a series of big-scale relief maps were laid out upon tables to display the whole seat of war, and the staff-officers of the control were continually busy shifting the little blocks which represented the contending troops, as the reports and intelligence came drifting in to the various telegraphic bureaux in the adjacent rooms. In other smaller apartments there were maps of a less detailed sort, upon which for example the reports of the British Admiralty and of the Slav commanders were recorded as they kept coming to hand. Upon these maps as upon chessboards Marshal Dubois, in consultation with General Viard and the Earl of Delhi, was to play the great game for world supremacy against the Central European powers. Very probably he had a definite idea of his game; very probably he had a coherent and admirable plan.

But he had reckoned without a proper estimate either of the new strategy of aviation or of the possibilities of atomic energy that Holsten had opened for mankind. While he

planned entrenchments and invasions and a frontier war the Central Europe generalship was striking at the eyes and the brain. And while, with a certain diffident hesitation he developed his gambit that night upon the lines laid down by Napoleon and Moltke, his own scientific corps in a state of mutinous activity was preparing a blow for Berlin. "These old fools!" was the key in which the scientific corps was thinking.

The War Control in Paris on the night of July the second was an impressive display of the paraphernalia of scientific military organisation, as the first half of the twentieth century understood it. To one human being at least, the consulting commanders had the likeness of world-wielding gods. . . .

She was a skilled typist, capable of nearly sixty words a minute, and she had been engaged in relay with other similar women to take down orders in duplicate and hand them over to the junior officers in attendance to be forwarded and filed. There had come a lull, and she had been sent out from the dictating room to take the air upon the terrace before the great hall and to eat such scanty refreshment as she had brought with her until her services were required again.

From her position upon the terrace this young woman had a view not only of the wide sweep of the river below her, and all the eastward side of Paris from the Arc de Triomphe to Saint Cloud, great blocks and masses of black or pale darkness with pink and golden flashes of illumination and endless interlacing bands of dotted lights under a still and starless sky, but also the whole spacious interior of the great hall with its slender pillars and gracious arching and clustering lamps was visible to her. There, over a wilderness of tables, lay the huge maps, done on so large a scale that one might fancy them small countries; the messengers and attendants went and came perpetually, altering, moving the little pieces that signified hundreds and thousands of men, and the great commander and his two consultants stood amidst all these things and near where the fighting was nearest, scheming, directing. They had but to breathe a word and presently away there, in the world of reality, the punctual myriads moved. Men rose up and went forward and died. The fate of nations lay behind the eyes of these three men. Indeed they were like gods.

Most godlike of the three was Dubois. It was for him to decide; the others at most might suggest. Her woman's soul went out to this grave, handsome, still, old man, in a passion of instinctive worship. . . .

Once she had taken words of instruction from him direct. She had awaited them in an ecstasy of happiness—and fear. For her exaltation was made terrible by the dread that some error might dishonour her. . . .

She watched him now through the glass with all the un-

penetrating minuteness of an impassioned woman's observation.

He said little, she remarked. He looked but little at the maps. The tall Englishman beside him was manifestly troubled by a swarm of ideas, conflicting ideas; he craned his neck at every shifting of the little red, blue, black, and yellow pieces on the board and wanted to draw the commander's attention to this and that. Dubois listened, nodded, emitted a word and became still again, brooding like the national eagle.

His eyes were so deeply sunken under his white eyebrows that she could not see them; his moustache overhung the mouth from which those words of decision came. Viard, too, said little; he was a dark man with a drooping head and melancholy watchful eyes. He was more intent upon the French right, which was feeling its way now through Alsace to the Rhine. He was, she knew, an old colleague of Dubois; he knew him better, she decided, he trusted him more than this unfamiliar Englishman. . . .

Not to talk, to remain impassive and as far as possible in profile; these were the lessons that old Dubois had mastered years ago. To seem to know all, to betray no surprise, to refuse to hurry—itself a confession of miscalculation; by attention to these simple rules, Dubois had built up a steady reputation from the days when he had been a promising junior officer, a still, almost abstracted young man, deliberate but ready. Even then men had looked at him and said: "He will go far." Through fifty years of peace he had never once been found wanting, and at manœuvres his impassive persistence had perplexed and hypnotised and defeated many a more actively intelligent man. Deep in his soul Dubois had hidden his one profound discovery about the modern art of warfare, the key to his career. And this discovery was that *nobody knew*, that to act therefore was to blunder, that to talk was to confess; and that the man who acted slowly and steadfastly and above all silently had the best chance of winning through. Meanwhile one fed the men. Now by this same strategy he hoped to shatter those mysterious unknowns of the Central European command. Delhi might talk of a great flank march through Holland with all the British submarines and hydroplanes and torpedo craft pouring up the Rhine in support of it; Viard might crave for brilliance with the motor-bicycles, aeroplanes, and skimen among the Swiss mountains and a sudden swoop upon Vienna; the thing was to listen—and wait for the other side to begin experimenting. It was all experimenting. And meanwhile he remained in profile, with an air of assurance—like a man who sits in an automobile after the chauffeur has had his directions.

And every one about him was the stronger and surer for

that quiet face, that air of knowledge and unruffled confidence. The clustering lights threw a score of shadows of him upon the maps, great bunches of him, versions of a commanding presence, lighter or darker, dominated the field, and pointed in every direction. Those shadows symbolised his control. When a messenger came from the wireless room to shift this or that piece in the game, to replace under amended reports one Central European regiment by a score, to draw back or thrust out or distribute this or that force of the allies, the Marshal would turn his head and seem not to see, or look and nod slightly, as a master nods who approves a pupil's self-correction. "Yes, that's better."

How wonderful he was, thought the woman at the window, how wonderful it all was. This was the brain of the western world, this was Olympus with the warring earth at its feet. And he was guiding France, France so long a resentful exile from imperialism, back to her old predominance.

It seemed to her beyond the desert of a woman that she should be privileged to participate. . . .

It is hard to be a woman, full of the stormy impulse to personal devotion, and to have to be impersonal, abstract, exact, punctual. She must control herself. . . .

She gave herself up to fantastic dreams, dreams of the days when the war would be over and victory enthroned. Then perhaps this harshness, this armour would be put aside and the gods might unbend. Her eyelids drooped. . . .

She roused herself with a start. She became aware that the night outside was no longer still. That there was an excitement down below on the bridge and a running in the street and a flickering of searchlights among the clouds from some high place away beyond the Trocadero. And then the excitement came surging up past her and invaded the hall within.

One of the sentinels from the terrace stood at the upper end of the room gesticulating and shouting something.

And all the world had changed. A kind of throbbing. She couldn't understand. It was as if all the water-pipes and concealed machinery and cables of the ways beneath were beating—as pulses beat. And about her blew something like a wind—a wind that was dismay.

Her eyes went to the face of the Marshal as a frightened child might look towards its mother.

He was still serene. He was frowning slightly, she thought, that was natural enough, for the Earl of Delhi with one hand gauntly gesticulating had taken him by the arm and was all too manifestly disposed to drag him towards the great door that opened on the terrace. And Viard was hurrying towards the huge windows and doing so in the strangest of attitudes, bent forward and with eyes upturned.

Something up there ?

And then it was as if thunder broke overhead.

The sound struck her like a blow. She crouched together against the masonry and looked up. She saw three black shapes swooping down through the torn clouds, and from a point a little below two of them there had already started curling trails of red. . . .

Everything else in her being was paralysed, she hung through moments that seemed infinities, watching those red missiles whirl down towards her.

She felt torn out of the world. There was nothing else in the world but a crimson-purple glare and sound, deafening, all-embracing, continuing sound. Every other light had gone out about her and against this glare hung slanting walls, pirouetting pillars, projecting fragments of cornices and a disorderly flight of huge angular sheets of glass.

She had an impression of a great ball of crimson-purple fire like a maddened living thing that seemed to be whirling about very rapidly amidst a chaos of falling masonry, that seemed to be attacking the earth furiously, that seemed to be burrowing into it like a blazing rabbit. . . .

She had all the sensations of waking up out of a dream.

She found she was lying face downward on a bank of mould and that a little rivulet of hot water was running over one foot. She tried to raise herself and found her leg was very painful. She was not clear whether it was night or day nor where she was ; she made a second effort, wincing and groaning, and turned over and got into a sitting position and looked about her.

Everything seemed very silent. She was in fact in the midst of a vast uproar, but she did not realise this because her hearing had been destroyed.

At first she could not join on what she saw to any previous experience.

She seemed to be in a strange world, a soundless ruinous world, a world of heaped broken things. And it was lit—and somehow this was more familiar to her mind than any other fact about her—by a flickering, purplish-crimson light. Then close to her, rising above a confusion of débris, she recognised the Trocadero ; it was changed, something had gone from it, but its outline was unmistakable. It stood out against a streaming whirling uprush of red-lit steam. And with that she recalled Paris and the Seine and the warm overcast evening and the beautiful luminous organisation of the War Control. . . .

She drew herself a little way up the slope of earth on which she lay and examined her surroundings with an increasing understanding. . . .

The earth on which she was lying projected like a cape into the river. Quite close to her was a brimming lake of dammed-up water from which these warm rivulets and torrents were

trickling. Wisps of vapour came into circling existence a foot or so from its mirror-surface. Near at hand and reflected exactly in the water was the upper part of a familiar-looking stone pillar. On the side of her away from the water the heaped ruins rose steeply in a confused slope up to a glaring crest. Above and reflecting this glare towered pillowed masses of steam rolling swiftly upward to the zenith. It was from this crest that the livid glow that lit the world about her proceeded, and slowly her mind connected this mound with the vanished buildings of the War Control.

"*Mais!*" she whispered, and remained with staring eyes quite motionless for a time, crouching close to the warm earth.

Then presently this dim, broken human thing began to look about it again. She began to feel the need of fellowship. She wanted to question, wanted to speak, wanted to relate her experience. And her foot hurt her atrociously. There ought to be an ambulance. A little gust of querulous criticisms blew across her mind. This surely was a disaster! Always after a disaster there should be ambulances and helpers moving about. . . .

She craned her head. There was something there. But everything was so still!

"*Monsieur!*" she cried. Her ears, she noted, felt queer, and she began to suspect that all was not well with them.

It was terribly lonely in this chaotic strangeness, and perhaps this man—if it was a man, for it was difficult to see—might for all his stillness be merely insensible. He might have been stunned. . . .

The leaping glare beyond sent a ray into his corner and for a moment every little detail was distinct. It was Marshal Dubois. He was lying against a huge slab of the war map. To it there stuck and from it there dangled little wooden objects, the symbols of infantry and cavalry and guns as they were disposed upon the frontier. He did not seem to be aware of this at his back, he had an effect of inattention, not indifferent attention, but as if he were thinking. . . .

She could not see the eyes beneath his shaggy brows but it was evident he frowned. He frowned slightly, he had an air of not wanting to be disturbed. His face still bore that expression of assured confidence, that conviction that if things were left to him France might obey in security. . . .

She did not cry out to him again, but she crept a little nearer. A strange surmise made her eyes dilate. With a painful wrench she pulled herself up so that she could see completely over the intervening lumps of smashed-up masonry. Her hand touched something wet, and after one convulsive movement she became rigid.

It was not a whole man there; it was a piece of a man, the head and shoulders of a man that trailed down into a ragged darkness and a pool of shining black. . . .

And even as she stared the mound above her swayed and crumbled and a rush of hot water came pouring over her. Then it seemed to her that she was dragged downward. . . .

§ 3

When the rather brutish young aviator with the bullet head and the black hair close-cropped *en brosse* who was in charge of the French special scientific corps heard presently of this disaster to the War Control, he was so wanting in imagination in any sphere but his own, that he laughed. Small matter to him that Paris was burning. His mother and father and sister lived at Caudebec ; and the only sweetheart he had ever had, and it was poor love-making then, was a girl in Rouen. He slapped his second-in-command on the shoulder. " Now," he said, " there's nothing on earth to stop us going to Berlin and giving them tit-for-tat. . . . Strategy and reasons of state—they're over. . . . Come along, my boy, and we'll just show these old women what we can do when they let us have our heads."

He spent five minutes telephoning and then he went out into the courtyard of the château in which he had been installed and shouted for his automobile. Things would have to move quickly because there was scarcely an hour and a half before dawn. He looked at the sky and noted with satisfaction a heavy bank of clouds athwart the pallid east.

He was a young man of infinite shrewdness, and his material and aeroplanes were scattered all over the countryside, stuck away in barns, covered with hay, hidden in woods. A hawk could not have discovered any of them without coming within reach of a gun. But that night he only wanted one of the machines, and it was handy and quite prepared under a tarpaulin between two ricks not a couple of miles away ; he was going to Berlin with that and just one other man. Two men would be enough for what he meant to do. . . .

He had in his hands the black complement to all those other gifts science was urging upon unregenerate mankind, the gift of destruction, and he was an adventurous rather than a sympathetic type. . . .

He was a dark young man with something negroid about his gleaming face. He smiled like one who is favoured and anticipates great pleasures. There was an exotic richness, a chuckling flavour, about the voice in which he gave his orders, and he pointed his remarks with the long finger of a hand that was hairy and exceptionally big.

" We'll give them tit-for-tat," he said. " We'll give them tit-for-tat. No time to lose, boys. . . ."

And presently over the cloud-banks that lay above Westphalia and Saxony the swift aeroplane, with its atomic engine as noiseless as a dancing sunbeam and its phosphorescent

gyroscopic compass, flew like an arrow to the heart of the Central European hosts.

It did not soar very high ; it skimmed a few hundred feet above the banked darknesses of cumulus that hid the world, ready to plunge at once into their wet obscurities should some hostile flier range into vision. The tense young steersman divided his attention between the guiding stars above and the level tumbled surfaces of the vapour strata that hid the world below. Over great spaces those banks lay as even as a frozen lava-flow and almost as still, and then they were rent by ragged areas of translucency, pierced by clear chasms, so that dim patches of the land below gleamed remotely through abysses. Once he saw quite distinctly the plan of a big railway-station outlined in lamps and signals, and once the flames of a burning rick showing livid through a boiling drift of smoke on the side of some great hill. But if the world was masked it was alive with sounds. Up through that vapour floor came the deep roar of trains, the whistles of horns of motor-cars, a sound of rifle-fire away to the south, and as he drew near his destination the crowing of cocks. . . .

The sky above the indistinct horizons of this cloud sea was at first starry and then paler with a light that crept from north to east as the dawn came on. The Milky Way was invisible in the blue, and the lesser stars vanished. The face of the adventurer at the steering-wheel, darkly visible ever and again by the oval greenish glow of the compass face, had something of that firm beauty which all concentrated purpose gives, and something of the happiness of an idiot child that has at last got hold of the matches. His companion, a less imaginative type, sat with his legs spread wide over the long coffin-shaped box which contained in its compartments the three atomic bombs, the new bombs that would continue to explode indefinitely and which no one so far had ever seen in action. Hitherto Carolinum, their essential substance, had been tested only in almost infinitesimal quantities within steel chambers embedded in lead. Beyond the thought of great destruction slumbering in the black spheres between his legs, and a keen resolve to follow out very exactly the instructions that had been given him, the man's mind was a blank. His aquiline profile against the starlight expressed nothing but a profound gloom.

The sky below grew clearer as the Central European capital was approached.

So far they had been singularly lucky and had been challenged by no aeroplanes at all. The frontier scouts they must have passed in the night ; probably these were mostly under the clouds ; the world was wide and they had had luck in not coming close to any soaring sentinel. Their machine was painted a pale grey that lay almost invisibly over the cloud levels below. But now the east was flushing with the near

ascent of the sun, Berlin was but a score of miles ahead, and the luck of the Frenchman held. By imperceptible degrees the clouds below dissolved. . . .

Away to the north-eastward, in a cloudless pool of gathering light and with all its nocturnal illuminations still blazing, was Berlin. The left finger of the steersman verified roads and open spaces below upon the mica-covered square of map that was fastened by his wheel. There in a series of lake-like expansions was the Havel away to the right; over by those forests must be Spandau; there the river split about the Potsdam island; and right ahead was Charlottenburg, cleft by a great thoroughfare that fell like an indicating beam of light straight to the imperial headquarters. There, plain enough, was the Thiergarten; beyond rose the imperial palace, and to the right those tall buildings, those clustering, beflagged, bemasted roofs, must be the offices in which the Central European staff was housed. It was all coldly clear and colourless in the dawn.

He looked up suddenly as a humming sound grew out of nothing and became swiftly louder. Nearly overhead a German aeroplane was circling down from an immense height to challenge him. He made a gesture with his left arm to the gloomy man behind and then gripped his little wheel with both hands, crouched over it and twisted his neck to look upward. He was attentive, tightly strung, but quite contemptuous of their ability to hurt him. No German alive, he was assured, could outfly him, or indeed any one of the best Frenchmen. He imagined they might strike at him as a hawk strikes, but they were men coming down out of the bitter cold up there, in a hungry, spiritless morning mood; they came slanting down like a sword swung by a lazy man, and not so rapidly but that he was able to slip away from under them and get between them and Berlin. They began challenging him in German with a megaphone when they were still perhaps a mile away. The words came to him rolled up into a mere blob of hoarse sound. Then, gathering alarm from his grim silence, they gave chase and swept down, a hundred yards above him perhaps and a couple of hundred behind. They were beginning to understand what he was. He ceased to watch them and concentrated himself on the city ahead, and for a time the two aeroplanes raced. . . .

A bullet came tearing through the air by him, as though some one was tearing paper. A second followed. Something tapped the machine.

It was time to act. The broad avenues, the park, the palaces below rushed widening out nearer and nearer to them.

"Ready!" said the steersman.

The gaunt face hardened to grimness, and with both hands the bomb-thrower lifted the big atomic bomb from the box and steadied it against the side. It was a black sphere two feet in diameter. Between its handles was a little celluloid

stud, and to this he bent his head until his lips touched it. Then he had to bite in order to let the air in upon the inducive. Sure of its accessibility, he craned his neck over the side of the aeroplane and judged his pace and distance. Then very quickly he bent forward, bit the stud and hoisted the bomb over the side.

"Round," he whispered inaudibly.

The bomb flashed blinding scarlet in mid-air and fell, a descending column of blaze eddying spirally in the midst of a whirlwind. Both the aeroplanes were tossed like shuttlecocks, hurled high and sideways; and the steersman with gleaming eyes and set teeth fought in great banking curves for a balance. The gaunt man clung tight with hands and knees; his nostrils dilated, his teeth biting his lips. He was firmly strapped. . . .

When he could look down again it was like looking down upon the crater of a small volcano. In the open garden before the Imperial castle a shuddering star of evil splendour spurted and poured up smoke and flame towards them like an accusation. They were too high to distinguish people clearly, or mark the bomb's effect upon the building until suddenly the façade tottered amd crumbled before the flare as sugar dissolves in water. The man stared for a moment, showed all his long teeth, and then staggered into the cramped standing position his straps permitted, hoisted out and bit another bomb and sent it down after its fellow.

The explosion came this time more directly underneath the aeroplane and shot it upward edgeways. The bomb box tipped to the point of disgorgement, and the bomb-thrower was pitched forward upon the third bomb with his face close to its celluloid stud. He clutched its handles and with a sudden gust of determination that the thing should not escape him, bit its stud. Before he could hurl it over, the monoplane was slipping sideways. Everything was falling sideways. Instinctively he gave himself up to gripping, his body holding the bomb in its place.

Then that bomb had exploded also, and steersman, thrower, and aeroplane were just flying rags and splinters of metal and drops of moisture in the air, and a third column of fire rushed eddying down upon the doomed buildings below. . . .

§ 4

Never before in the history of warfare had there been a continuing explosive; indeed up to the middle of the twentieth century the only explosives known were combustibles whose explosiveness was due entirely to their instantaneousness; and these atomic bombs which science burst upon the world that night were strange even to the men who used them. Those used by the allies were lumps of pure Carolinum, painted on

the outside with unoxidised cydonator inducive enclosed hermetically in a case of membranium. A little celluloid stud between the handles by which the bomb was lifted was arranged so as to be easily torn off and admit air to the inducive, which at once became active and set up radio-activity in the outer layer of the Carolinum sphere. This liberated fresh inducive, and so in a few minutes the whole bomb was a blazing continual explosion. The Central European bombs were the same except that they were larger and had a more complicated arrangement for animating the inducive.

Always before in the development of warfare the shells and rockets fired had been but momentarily explosive, they had gone off in an instant once for all, and if there was nothing living or valuable within reach of the concussion and the flying fragments then they were spent and over. But Carolinum, which belonged to the β group of Hyslop's so-called "suspended degenerator" elements, once its degenerative process had been induced, continued a furious radiation of energy and nothing could arrest it. Of all Hyslop's artificial elements Carolinum was the most heavily stored with energy and the most dangerous to make and handle. To this day it remains the most potent degenerator known. What the earlier twentieth century chemists called its half-period was seventeen days; that is to say, it poured out half of the huge store of energy in its great molecules in the space of seventeen days, the next seventeen days' emission was a half of that first period's outpouring, and so on. As with all radio-active substances this Carolinum, though every seventeen days its power is halved, though constantly it diminishes towards the imperceptible, is never entirely exhausted, and to this day the battlefields and bomb fields of that frantic time in human history are sprinkled with radiant matter and so centres of inconvenient rays. . . .

What happened when the celluloid stud was opened was that the inducive oxydised and became active. Then the surface of the Carolinum began to degenerate. This degeneration passed only slowly into the substance of the bomb. A moment or so after its explosion began it was still mainly an inert sphere exploding superficially, a big, inanimate nucleus wrapped in flame and thunder. Those that were thrown from aeroplanes fell in this state, they reached the ground still mainly solid and, melting soil and rock in their progress, bored into the earth. There, as more and more of the Carolinum became active, the bomb spread itself out into a monstrous cavern of fiery energy at the base of what became very speedily a miniature active volcano. The Carolinum, unable to disperse, freely drove into and mixed up with a boiling confusion of molten soil and superheated steam and so remained spinning furiously and maintaining an eruption that lasted for years or months or weeks according to the size

of the bomb employed and the chances of its dispersal. Once launched the bomb was absolutely unapproachable and uncontrollable until its forces were nearly exhausted, and from the crater that burst open above it, puffs of heavy incandescent vapour and fragments of viciously punitive rock and mud, saturated with Carolinum, and each a centre of scorching and blistering energy, were flung high and far.

Such was the crowning triumph of military science, the ultimate explosive that was to give the "decisive touch" to war. . . .

§ 5

A recent historical writer has described the world of that time as one that "believed in established words and was invincibly blind to the obvious in things." Certainly it seems now that nothing could have been more obvious to the people of the earlier twentieth century than the rapidity with which war was becoming impossible. And as certainly they did not see it. They did not see it until the atomic bombs burst in their fumbling hands. Yet the broad facts must have glared upon any intelligent mind. All through the nineteenth and twentieth centuries the amount of energy that men were able to command was continually increasing. Applied to warfare that meant that the power to inflict a blow, the power to destroy, was continually increasing. There was no increase whatever in the ability to escape. Every sort of passive defence, armour, fortifications and so forth was being outmastered by this tremendous increase on the destructive side. Destruction was becoming so facile that any little body of malcontents could use it; it was revolutionising the problems of police and internal rule. Before the last war began it was a matter of common knowledge that a man could carry about in a handbag an amount of latent energy sufficient to wreck half a city. These facts were before the minds of everybody; the children in the streets knew them. And yet the world still, as the Americans used to phrase it, "fooled around" with the paraphernalia and pretensions of war.

It is only by realising this profound, this fantastic divorce between the scientific and intellectual movement on the one hand and the world of the lawyer-politician on the other that the men of a later time can hope to understand this preposterous state of affairs. Social organisation was still in the barbaric stage. There were already great numbers of actively intelligent men and much private and commercial civilisation, but the community as a whole was aimless, untrained and unorganised to the pitch of imbecility. Collective civilisation, the "Modern State," was still in the womb of the future. . .

§ 6

But let us return to Frederick Barnet's *Wanderjahre*, and its account of the experiences of a common man during the war time. While these terrific disclosures of scientific possibility were happening in Paris and Berlin, Barnet and his company were industriously entrenching themselves in Belgian Luxembourg.

He tells of the mobilisation and of his summer day's journey through the north of France and the Ardennes in a few vivid phrases. The country was browned by a warm summer, the trees a little touched with autumnal colour, and the wheat already golden. When they stopped for an hour at Hirson men and women with tricolour badges upon the platform distributed cakes and glasses of beer to the thirsty soldiers and there was much cheerfulness. "Such good cool beer it was," he wrote. "I had had nothing to eat nor drink since Epsom."

A number of monoplanes "like giant swallows," he notes, were scouting in the pink evening sky.

Barnet's battalion was sent through the Sedan country to a place called Virton and thence to a point in the woods on the line to Jemelle. Here they detrained, bivouacked uneasily by the railway—trains and stores were passing along it all night—and next morning he marched eastward through a cold overcast dawn and a morning, first cloudy and then blazing, over a large spacious country-side interspersed by forest towards Arlon.

There the infantry were set to work upon a line of masked entrenchments and hidden rifle-pits between St. Hubert and Virton that were designed to check and delay any advance from the east upon the fortified line of the Meuse. They had their orders, and for two days they worked without either a sight of the enemy or any suspicion of the disaster that had abruptly decapitated the armies of Europe, and turned the west of Paris and the centre of Berlin into blazing miniatures of the destruction of Pompeii.

And the news, when it did come, came attenuated. "We heard there had been mischief with aeroplanes and bombs in Paris," Barnet relates; "but it didn't seem to follow that 'They' weren't still somewhere elaborating their plans and issuing orders. When the enemy began to emerge from the woods in front of us, we cheered and blazed away, and didn't trouble much more about anything but the battle in hand. If now and then one cocked up an eye into the sky to see what was happening there, the rip of a bullet soon brought one down to the horizontal again. . . .

That battle went on for three days all over a great stretch of country between Louvain on the north and Longwy to the south. It was essentially a rifle and infantry struggle. The

aeroplanes do not seem to have taken any decisive share in the actual fighting, though no doubt they affected the strategy from the first by preventing surprise movements. They were aeroplanes with atomic engines, but they were not provided with atomic bombs, which were manifestly unsuitable for field use, nor indeed had they any very effective kind of bomb. And though they manœuvred against each other, and there was rifle shooting at them and between them, there was little actual aerial fighting. Either the airmen were indisposed to fight or the commanders on both sides preferred to reserve these machines for scouting. . . .

After a day or so of digging and scheming, Barnet found himself in the forefront of a battle. He had made his section of rifle-pits chiefly along a line of deep dry ditch that gave a means of intercommunication, he had had the earth scattered over the adjacent field and he had masked his preparations with tussocks of corn and poppy. The hostile advance came blindly and unsuspiciously across the fields below and would have been very cruelly handled indeed if some one away to the right had not opened fire too soon.

"It was a queer thrill when these fellows came into sight," he confesses, "and not a bit like manœuvres. They halted for a time on the edge of the wood and then came forward in an open line. They kept walking nearer to us and not looking at us, but away to the right of us. Even when they began to be hit, and their officers' whistles woke them up, they didn't seem to see us. One or two halted to fire and then they all went back towards the wood again. They went slowly at first, looking round at us, then the shelter of the wood seemed to draw them and they trotted. I fired rather mechanically and missed, then I fired again, and then I became earnest to hit something, made sure of my sighting and aimed very carefully at a blue back that was dodging about in the corn. At first I couldn't satisfy myself and didn't shoot, his movements were so spasmodic and uncertain; then I think he came to a ditch or some such obstacle and halted for a moment. '*Got* you,' I whispered, and pulled the trigger.

"I had the strangest sensations about that man. In the first instance when I felt that I had hit him I was irradiated with joy and pride. . . .

"I sent him spinning. He jumped and threw up his arms. . . .

"Then I saw the corn tops waving and had glimpses of him flapping about. Suddenly I felt sick. I hadn't killed him. . . .

"In some way he was disabled and smashed up and yet able to struggle about. I began to think. . . .

"For nearly two hours that Prussian was agonising in the corn. Either he was calling out or some one was shouting to him. . . .

"Then he jumped up—he seemed to try and get up upon his feet with one last effort; and then he fell like a sack and lay quite still and never moved again.

"He had been unendurable, and I believe some one had shot him dead. I had been wanting to do so for some time. . . ."

The enemy began sniping the rifle-pits from shelters they made for themselves in the woods below. A man was hit in the pit next to Barnet and began cursing and crying out in a violent rage. Barnet crawled along the ditch to him and found him in great pain, covered with blood, frantic with indignation and with the half of his right hand smashed to a pulp. "Look at this," he kept repeating, hugging it and then extending it. "Damned foolery! Damned foolery! My right hand, sir! My right hand!"

For some time Barnet could do nothing with him. The man was consumed by his tortured realisation of the evil silliness of war, the realisation which had come upon him in a flash with the bullet that had destroyed his skill and use as an artificer for ever. He was looking at the vestiges with a horror that made him impenetrable to any other idea. At last the poor wretch let Barnet tie up his bleeding stump and help him along the ditch that conducted him deviously out of range. . . .

When Barnet returned his men were already calling out for water, and all day long the line of pits suffered greatly from thirst. For food they had chocolate and bread.

"At first," he says, "I was extraordinarily excited by my baptism of fire. Then as the heat of the day came on I experienced an enormous tedium and discomfort. The flies became extremely troublesome and my little grave of a rifle-pit was invaded by ants. I could not get up or move about, for some one in the trees had got a mark on me. I kept thinking of the dead Prussian down among the corn and of the bitter outcries of my own man. Damned foolery! It *was* damned foolery. But who was to blame? How had we got to this? . . .

"Early in the afternoon an aeroplane tried to dislodge us with dynamite bombs, but she was hit by bullets once or twice and suddenly dived down over beyond the trees.

"'From Holland to the Alps this day,' I thought, 'there must be crouching and lying upwards of half a million of men, trying to inflict irreparable damage upon one another. The thing is idiotic to the pitch of impossibility. It is a dream. Presently I shall wake up.' . . .

"Then the phrase changed itself in my mind. 'Presently mankind will wake up.'

"I lay speculating just how many thousands of men there were among these hundreds of thousands whose spirits were in rebellion against all these ancient traditions of flag and empire. Weren't we perhaps already in the throes of the last

crisis, in that darkest moment of a nightmare's horror before the sleeper will endure no more of it—and wakes ?

"I don't know how my speculations ended. I think they were not so much ended as distracted by the distant thudding of the guns that were opening fire at long range upon Namur."

§ 7

But as yet Barnet had seen no more than the mildest beginnings of modern warfare. So far he had taken part only in a little shooting. The bayonet attack by which the advanced line was broken was made at a place called Croix Rouge more than twenty miles away, and that night under cover of the darkness the rifle-pits were abandoned and he got his company away without further loss.

His regiment fell back unpressed behind the fortified lines between Namur and Sedan, entrained at a station called Mettet, and was sent northward by Antwerp and Rotterdam to Haarlem. Hence they marched into North Holland. It was only after the march into Holland that he began to realise the monstrous and catastrophic nature of the struggle in which he was playing his undistinguished part.

He describes very pleasantly the journey through the hills and open land of Brabant, the repeated crossing of arms of the Rhine, and the change from the undulating scenery of Belgium to the flat rich meadows, the sunlit dike roads, and the countless windmills of the Dutch levels. In those days there was unbroken land from Alkmaar and Leiden to the Dollart. Three great provinces, South Holland, North Holland, and Zuiderzeeland, reclaimed at various times between the early tenth century and 1945 and all many feet below the level of the waves outside the dikes, spread out their lush polders to the northern sun and sustained a dense industrious population. An intricate web of laws and custom and tradition insured a perpetual vigilance and a perpetual defence against the beleaguering sea. For more than two hundred and fifty miles from Walcheren to Friesland stretched a line of embankments and pumping stations that was the admiration of the world.

If some curious god had chosen to watch the course of events in those northern provinces while that flanking march of the British was in progress, he would have found a convenient and appropriate seat for his observation upon one of the great cumulus clouds that were drifting slowly across the blue sky during all these eventful days before the great catastrophe. For that was the quality of the weather, hot and clear with something of a breeze, and underfoot dry and a little inclined to be dusty. This watching god would have looked down upon broad stretches of sunlit green, sunlit save for the creeping patches of shadow cast by the clouds, upon sky-reflecting meers, fringed and divided up by masses of

willow and large areas of silvery weeds, upon white roads lying bare to the sun and upon a tracery of blue canals. The pastures were alive with cattle, the roads had a busy traffic of beasts and bicycles and gaily coloured peasants' automobiles, the hues of the innumerable motor-barges in the canal vied with the eventfulness of the roadways; and everywhere in solitary steadings, amidst ricks and barns, in groups by the wayside, in straggling villages, each with its fine old church, or in compact towns laced with canals and abounding in bridges and clipped trees, were human habitations.

The people of this countryside were not belligerents. The interests and sympathies alike of Holland had been so divided that to the end she remained undecided and passive in the struggle of the world powers. And everywhere along the roads taken by the marching armies clustered groups and crowds of impartially observant spectators, women and children in peculiar white caps and old-fashioned sabots, and elderly, clean-shaven men quietly thoughtful over their long pipes. They had no fear of their invaders; the days when "soldiering" meant bands of licentious looters had long since passed away. . . .

That watcher among the clouds would have seen a great distribution of khaki-uniformed men and khaki-painted material over the whole of the sunken area of Holland. He would have marked the long trains, packed with men or piled with great guns and war material, creeping slowly, alert for train-wreckers, along the north-going lines; he would have seen the Scheldt and Rhine choked with shipping and pouring out still more men and still more material; he would have noticed halts and provisionings and detrainments, and the long bustling caterpillars of cavalry and infantry, the maggot-like waggons, the huge beetles of great guns, crawling under the poplars along the dikes and roads northward, along ways lined by the neutral, unmolested, ambiguously observant Dutch. All the barges and shipping upon the canals had been requisitioned for transport. In that clear bright warm weather it would all have looked from above like some extravagant festival of animated toys.

As the sun sank westward the spectacle must have become a little indistinct because of a golden haze; everything must have become warmer and more glowing, and because of the lengthening of the shadows more manifestly in relief. The shadows of the tall churches grew longer and longer until they touched the horizon and mingled in the universal shadow; and then, slow and soft, and wrapping the world in fold after fold of deepening blue, came the night—the night at first obscurely simple, and then with faint points here and there, and then jewelled in darkling splendour with a hundred thousand lights. Out of that mingling of darkness and ambiguous glares the noise of an unceasing activity would

have arisen, the louder and plainer now because there was no longer any distraction of sight.

It may be that watcher drifting in the pellucid gulf beneath the stars watched all through the night; it may be that he dozed. But if he gave way to so natural a proclivity assuredly on the fourth night of the great flank march he was aroused, for that was the night of the battle in the air that decided the fate of Holland.

The aeroplanes were fighting at last, and suddenly about him, above and below, with cries and uproar rushing out of the four quarters of heaven, striking, plunging, oversetting, soaring to the zenith and dropping to the ground, they came to assail or defend the myriads below.

Secretly the Central European power had gathered his flying machines together, and now he threw them as a giant might fling a handful of ten thousand knives over the low country. And amidst that swarming flight were five that drove headlong for the sea-walls of Holland, carrying atomic bombs. From north and west and south the allied aeroplanes rose in response and swept down upon this sudden attack. So it was that war in the air began. Men rode upon the whirlwind that night and slew and fell like archangels. The sky rained heroes upon the astonished earth. Surely the last fights of mankind were the best. What was the heavy pounding of your Homeric swordsmen, what was the creaking charge of chariots, beside this swift rush, this crash, this giddy triumph, this headlong swoop to death?

And then athwart this whirling rush of aerial duels that swooped and locked and dropped in the void between the lamp-lights and the stars came a great wind and a crash louder than thunder, and first one and then a score of lengthening fiery serpents plunged hungrily down upon the Dutchmen's dikes and struck between land and sea and flared up again in enormous columns of glare and crimsoned smoke and steam.

And out of the darkness leaped the little land, with its spires and trees, aghast with terror, still and distinct, and the sea, tumbled with anger, red-foaming like a sea of blood. . . .

Over the populous country below went a strange multitudinous crying and a flurry of alarm bells. . . .

The surviving aeroplanes turned about and fled out of the sky, like things that suddenly know themselves to be wicked. . . .

Through a dozen thunderously flaming gaps that no water might quench, the waves came roaring in upon the land. . . .

§ 8

"We had cursed our luck," says Barnet, "that we could not get to our quarters at Alkmaar that night. There, we

were told, were provisions, tobacco, and everything for which we craved. But the main canal from Zaandam and Amsterdam was hopelessly jammed with craft, and we were glad of a chance opening that enabled us to get out of the main column and lie up in a kind of little harbour very much neglected and weedgrown before a deserted house. We broke into this and found some herrings in a barrel, a heap of cheeses, and stone bottles of gin in the cellar; and with this I cheered my starving men. We made fires and toasted the cheese and grilled our herrings. None of us had slept for nearly forty hours and I determined to stay in this refuge until dawn, and then if the traffic was still choked leave the barge and march the rest of the way into Alkmaar.

"This place we had got into was perhaps a hundred yards from the canal, and underneath a little brick bridge we could see the flotilla still and hear the voices of the soldiers. Presently five or six other barges came through and lay up in the meer near by us, and with two of these, full of men of the Antrim regiment, I shared my find of provisions. In return we got tobacco. A large expanse of water spread to the westward of us and beyond were a cluster of roofs and one or two church towers. The barge was rather cramped for so many men, and I let several squads, thirty or forty perhaps altogether, bivouac on the bank. I did not let them go into the house on account of the furniture, and I left a note of indebtedness for the food we had taken. We were particularly glad of our tobacco and fires because of the numerous mosquitoes that rose about us.

"The gate of the house from which we had provisioned ourselves was adorned with the legend *Vreugde bij Vrede*, 'Joy with Peace,' and it bore every mark of the busy retirement of a comfort-loving proprietor. I went along his garden, which was gay and delightful with big bushes of rose and sweetbriar, to a quaint little summer-house, and there I sat and watched the men in groups cooking and squatting along the bank. The sun was setting in a nearly cloudless sky.

"For the last two weeks I had been a wholly occupied man, intent only upon obeying the orders that came down to me. All through this time I had been working to the very limit of my mental and physical faculties, and my only moments of rest had been devoted to snatches of sleep. Now came this rare unexpected interlude, and I could look detachedly upon what I was doing and feel something of its infinite wonderfulness. I was irradiated with affection for the men of my company and with admiration at their cheerful acquiescence in the subordination and needs of our positions. I watched their proceedings and heard their pleasant voices. How willing those men were! How ready to accept leadership and forget themselves in collective ends! I thought

how manfully they had gone through all the strains and toil of the last two weeks, how they had toughened and shaken down to comradeship together, and how much sweetness there is after all in our foolish human blood. For they were just one casual sample of the species—their patience and readiness lay, as the energy of the atom had lain, still waiting to be properly utilised. Again it came to me with overpowering force that the supreme need of our race is leading, that the supreme task is to discover leading, to forget oneself in realising the collective purpose of the race. Once more I saw life plain. . . ."

Very characteristic is that of the "rather too corpulent" young officer, who was afterwards to set it all down in the *Wanderjahre*. Very characteristic too it is of the change in men's hearts that was even then preparing a new phase of human history.

He goes on to write of the escape from individuality in science and service and of his discovery of this "salvation." All that was then no doubt very moving and original; now it seems only the most obvious commonplace of human life.

The glow of the sunset faded, the twilight deepened into night. The fires burned the brighter, and some Irishmen away across the meer started singing. But Barnet's men were too weary for that sort of thing, and soon the bank and the barge were heaped with sleeping forms.

"I alone seemed unable to sleep. I suppose I was overtired, and after a little feverish slumber by the tiller of the barge I sat up, awake and uneasy. . . .

"That night Holland seemed all sky. There was just a little black lower rim to things, a steeple perhaps or a line of poplars, and then the great hemisphere swept over us. As at first, the sky was empty. Yet my uneasiness referred itself in some vague way to the sky.

"And now I was melancholy. I found something strangely sorrowful and submissive in the sleepers all about me, those men who had marched so far, who had left all the established texture of their lives behind them to come upon this mad campaign, this campaign that signified nothing and consumed everything, this mere fever of fighting. I saw how little and feeble is the life of man, a thing of chances, preposterously unable to find the will to realise even the most timid of its dreams. And I wondered if always it would be so, if man was a doomed animal who would never to the last days of his time take hold of fate and change it to his will. Always, it may be, he will remain kindly but jealous, desirous but discursive, able and unwisely impulsive, until Saturn who begot him shall devour him in his turn. . . .

"I was roused from these thoughts by the sudden realisation of the presence of a squadron of aeroplanes far away to the north-east and very high. They looked like little black

dashes against the midnight blue. I remember that I looked up at them at first rather idly—as one might notice a flight of birds. Then I perceived that they were only the extreme wing of a great fleet that was advancing in a long line very swiftly from the direction of the frontier, and my attention tightened.

"Directly I saw that fleet I was astonished not to have seen it before.

"I stood up softly, undesirous of disturbing my companions, but with my heart beating now rather more rapidly with surprise and excitement. I strained my ears for any sound of guns along our front. Almost instinctively I turned about for protection to the south and west, and peered; and then I saw coming as fast and much nearer to me, as if they had sprung out of the darkness, three banks of aeroplanes; a group of squadrons very high, a main body at a height perhaps of one or two thousand feet, and a doubtful number flying low and very indistinct. The middle ones were so thick they kept putting out groups of stars. And I realised that after all there was to be fighting in the air.

"There was something extraordinarily strange in this swift, noiseless convergence of nearly invisible combatants above the sleeping hosts. Every one about me was still unconscious; there was no sign as yet of any agitation among the shipping on the main canal whose whole course, dotted with unsuspicious lights and fringed with fires, must have been clearly perceptible from above. Then a long way off towards Alkmaar I heard bugles, and after that shots, and then a wild clamour of bells. I determined to let my men sleep on for as long as they could. . . .

"The battle was joined with the swiftness of dreaming. I do not think it could have been five minutes from the moment when I first became aware of the Central European air fleet to the contact of the two forces. I saw it quite plainly in silhouette against the luminous blue of the northern sky. The allied aeroplanes—they were mostly French—came pouring down like a fierce shower upon the middle of the Central European fleet. They looked exactly like a coarser sort of rain. There was a crackling sound—the first sound I heard—it reminded one of the Aurora Borealis and I supposed it was an interchange of rifle-shots. There were flashes like summer lightning; and then all the sky became a whirling confusion of battle that was still largely noiseless. Some of the Central European aeroplanes were certainly charged and overset; others seemed to collapse and fall and then flare out with so bright a light that it took the edge off one's vision and made the rest of the battle disappear as though it had been snatched back out of sight.

"And then while I still peered and tried to shade these flames from my eyes with my hand, and while the men about

me were beginning to stir, the atomic bombs were thrown at the dikes. They made a mighty thunder in the air, and fell like Lucifer in the picture, leaving a flaring trail in the sky. The night which had been pellucid and detailed and eventful seemed to vanish, to be replaced abruptly by a black background to these tremendous pillars of fire. . . .

"Hard upon the sound of them came a roaring wind, and the sky was filled with flickering lightnings and rushing clouds. . . .

"There was something discontinuous in this impact. At one moment I was a lonely watcher in a sleeping world; the next saw every one about me afoot, the whole world awake and amazed. . . .

"And then the wind had struck me a buffet, taken my helmet and swept aside the summer-house of *Vreugde bij Vrede*, as a scythe sweeps away grass. I saw the bombs fall, and then watched a great crimson flare leap responsive to each impact, and mountainous masses of red-lit steam and flying fragments clamber up towards the zenith. Against the glare I saw the country-side for miles standing black and clear, churches, trees, chimneys. And suddenly I understood. The Central Europeans had burst the dikes. Those flares meant the bursting of the dikes, and in a little while the sea-water would be upon us. . . ."

He goes on to tell with a certain prolixity of the steps he took—and all things considered they were very intelligent steps—to meet this amazing crisis. He got his men aboard and hailed the adjacent barges; he got the man who acted as barge engineer at his post and the engines working, he cast loose from his moorings. Then he bethought himself of food and contrived to land five men, get in a few dozen cheeses and ship his men again before the inundation reached them.

He is reasonably proud of this piece of coolness. His idea was to take the wave head-on and with his engines full speed ahead. And all the while he was thanking heaven he was not in the jam of traffic in the main canal. He rather, I think, overestimated the probable rush of waters; he dreaded being swept away, he explains, and smashed against houses and trees.

He does not give any estimate of the time it took between the bursting of the dikes and the arrival of the waters, but it was probably an interval of about twenty minutes or half an hour. He was working now in darkness—save for the light of his lantern—and in a great wind. He hung out head and stern lights. . . .

Whirling torrents of steam were pouring up from the advancing waters, which had rushed, it must be remembered, through nearly incandescent gaps in the sea defences, and this vast uprush of vapour soon veiled the flaring centres of explosion altogether. . . .

"The waters came at last, an advancing cascade. It was like a broad roller sweeping across the country. They came with a deep roaring sound. I had expected a Niagara, but the total fall of the front could not have been much more than twelve feet. Our barge hesitated for a moment, took a dose over her bows and then lifted. I signalled for full speed ahead and brought her head up-stream, and held on like grim death to keep her there.

"There was a wind about as strong as the flood, and I found we were pounding against every conceivable buoyant object that had been between us and the sea. The only light in the world now came from our lamps, the steam became impenetrable at a score of yards from the boat, and the roar of the wind and water cut us off from all remoter sounds. The black shining waters swirled by, coming into the light of our lamps out of an ebony blackness and vanishing again into impenetrable black. And on the waters came shapes, came things that flashed upon us for a moment, now a half-submerged boat, now a cow, now a huge fragment of a house's timberings, now a muddle of packing-cases and scaffolding. The things clapped into sight like something shown by the opening of a shutter, and then bumped shatteringly against us or rushed by us. Once I saw very clearly a man's white face. . . .

"All the while a group of labouring, half-submerged trees remained ahead of us drawing very slowly nearer. I steered a course to avoid them. They seemed to gesticulate a frantic despair against the black steam clouds behind. Once a great branch detached itself and tore shuddering by me. We did on the whole make headway. The last I saw of *Vreugde bij Vrede* before the night swallowed it was almost dead astern of us. . . ."

§ 9

Morning found Barnet still afloat. The bows of his barge had been badly strained, and his men were pumping or baling in relays. He had got about a dozen half-drowned people aboard whose boat had capsized near him, and he had three other boats in tow. He was afloat, and somewhere between Amsterdam and Alkmaar, but he could not tell where. It was a day that was still half-night. Grey waters stretched in every direction under a dark grey sky, and out of the waves rose the upper parts of houses, in many cases ruined, the tops of trees, windmills, in fact the upper third of all the familiar Dutch scenery; and on it there drifted a dimly seen flotilla of barges, small boats, many overturned, furniture, rafts, timbering and miscellaneous objects.

The drowned were under water that morning. Only here and there did a dead cow or a stiff figure still clinging stoutly

to a box or chair or suchlike buoy hint at the hidden massacre. It was not till the Thursday that the dead came to the surface in any quantity. The view was bounded on every side by a grey mist that closed overhead in a grey canopy. The air cleared in the afternoon, and then far away to the west under great banks of steam and dust, the flaming red eruption of the atomic bombs came visible across the waste of water.

They showed flat and sullen through the mist, like London sunsets. "They sat upon the sea," says Barnet, "like frayed-out waterlilies of flame."

Barnet seems to have spent the morning in rescue work along the track of the canal, in helping people who were adrift, in picking up derelict boats and in taking people out of imperilled houses. He found other military barges similarly employed, and it was only as the day wore on and the immediate appeals for aid were satisfied that he thought of food and drink for his men and what course he had better pursue. They had a little cheese but no water. "Orders," that mysterious direction, had at last altogether disappeared. He perceived he had now to act upon his own responsibility.

"One's sense was of a destruction so far-reaching and of a world so altered that it seemed foolish to go in any direction and expect to find things as they had been before the war began. I sat on the quarter-deck with Mylius my engineer and Kemp and two others of the non-commissioned officers, and we consulted upon our line of action. We were foodless and aimless. We agreed that our fighting value was extremely small, and that our first duty was to get ourselves in touch with food and instructions again. Whatever plan of campaign had directed our movements was manifestly smashed to bits. Mylius was of opinion that we could take a line westward and get back to England across the North Sea. He calculated that with such a motor-barge as ours it would be possible to reach the Yorkshire coast within four-and-twenty hours. But this idea I overruled because of the shortness of our provisions, and more particularly because of our urgent need of water.

"Every boat we drew near now hailed us for water, and their demands did much to exasperate our thirst. I decided that if we went away to the south we should reach hilly country, or at least country that was not submerged, and then we should be able to land, find some stream, drink, and get supplies and news. Many of the barges adrift in the haze about us were filled with British soldiers and had floated up from the Nord See Canal, but none of them were any better informed than ourselves of the course of events. 'Orders' had in fact vanished out of the sky.

"'Orders' made a temporary reappearance late that evening in the form of a megaphone hail from a British torpedo-boat, announcing a truce, and giving the welcome information

that food and water were being hurried down the Rhine and were to be found on the barge flotilla lying over the old Rhine above Leiden. . . ."

We will not follow Barnet, however, in the description of his strange overland voyage among trees and houses and churches by Zaandam and between Haarlem and Amsterdam, to Leiden. It was a voyage in a red-lit mist, in a world of steamy silhouette, full of strange voices and perplexity and with every other sensation dominated by a feverish thirst. "We sat," he says, "in a huddled group, saying very little, and the men forward were mere knots of silent endurance. Our only continuing sound was the persistent mewing of a cat one of the men had rescued from a floating hayrick near Zaandam. We kept a southward course by a watch-chain compass Mylius had produced. . . .

"I do not think any of us felt we belonged to a defeated army, nor had we any strong sense of the war as the dominating fact about us. Our mental setting had far more of the effect of a huge natural catastrophe. The atomic bombs had dwarfed the international issues to complete insignificance. When our minds wandered from the preoccupations of our immediate needs, we speculated upon the possibility of stopping the use of these frightful explosives before the world was utterly destroyed. For to us it seemed quite plain that these bombs and the still greater power of destruction of which they were the precursors might quite easily shatter every relationship and institution of mankind.

"'What will they be doing,' asked Mylius, 'what will they be doing? It's plain we've got to put an end to war. It's plain things have to be run some way. *This*—all this—is impossible.'

"I made no immediate answer. Something—I cannot think what—had brought back to me the figure of that man I had seen wounded on the very first day of actual fighting. I saw again his angry tearful eyes and that poor dripping bloody mess that had been a skilful human hand five minutes before, thrust out in indignant protest. 'Damned foolery,' he had stormed and sobbed, 'damned foolery. My right hand, sir! My *right* hand. . . .'

"My faith had for a time gone altogether out of me. 'I think we are too—too silly,' I said to Mylius, 'ever to stop war. If we'd had the sense to do it, we should have done it before this. I think this——' I pointed to the gaunt black outline of a smashed windmill that stuck up, ridiculous and ugly, above the blood-lit waters—'this is the end.'"

§ 10

But now our history must part company with Frederick Barnet and his barge-load of hungry and starving men.

For a time in western Europe at least it was indeed as if civilisation had come to a final collapse. These crowning buds upon the tradition that Napoleon planted and Bismarck watered, opened and flared "like waterlilies of flame" over nations destroyed, over churches smashed or submerged, towns ruined, fields lost to mankind for ever and a million weltering bodies. Was this lesson enough for mankind, or would the flames of war still burn amidst the ruins?

Neither Barnet nor his companions, it is clear, had any assurance in their answers to that question. Already once in the history of mankind, in America, before its discovery by the whites, an organised civilisation had given way to a mere cult of warfare, specialised and cruel, and it seemed for a time to many a thoughtful man as if the whole world was but to repeat on a larger scale this ascendancy of the warrior, this triumph of the destructive instincts of the race.

The subsequent chapters of Barnet's narrative do not supply body to this tragic possibility. He gives a series of vignettes of civilisation shattered, it seemed, almost irreparably. He found the Belgian hills swarming with refugees and desolated by cholera; the vestiges of the contending armies keeping order under a truce, without actual battles but with the cautious hostility of habit, and a great absence of plan everywhere.

Overhead aeroplanes went on mysterious errands, and there were rumours of cannibalism and hysterical fanaticisms in the valleys of the Semoy and the forest region of the eastern Ardennes. There was the report of an attack upon Russia by the Chinese and Japanese and of some huge revolutionary outbreak in America. The weather was stormier than men had ever known it in those regions, with much thunder and lightning and wild cloudbursts of rain. . . .

CHAPTER THREE

THE ENDING OF WAR

§ 1

On the mountainside above the town of Brissago and commanding two long stretches of Lake Maggiore, looking eastward to Bellinzona and southward to Luino, there is a shelf of grass meadows which is very beautiful in springtime with a great multitude of wild flowers. More particularly is this so in early June when the slender asphodel, Saint Bruno's lily, with its spike of white blossom, is in flower. To the westward of this delightful shelf there is a deep and densely wooded trench, a great gulf of blue some mile or so in width out of which arise great precipices very high and wild. Above the asphodel fields the mountains climb in rocky slopes to solitudes of stone and sunlight that curve round and join that wall of cliffs in one common skyline. This desolate and austere background contrasts very vividly with the glowing serenity of the great lake below, with the spacious view of fertile hills and roads and villages and islands to south and east, and with the hotly golden rice flats of the Val Maggia to the north.

And because it was a remote and insignificant place, far away out of the crowding tragedies of that year of disaster, away from burning cities and starving multitudes, bracing and tranquillising and hidden, it was here that there gathered the conference of rulers that was to arrest if possible, before it was too late, the *débâcle* of civilisation. Here, brought together by the indefatigable energy of that impassioned humanitarian, Leblanc, the French ambassador at Washington, the chief powers of the world were to meet in a last desperate conference to "save humanity."

Leblanc was one of those ingenuous men whose lot would have been insignificant in any period of security, but who have been caught up to an immortal rôle in history by the sudden simplification of human affairs through some tragical crisis, to the measure of their simplicity. Such a man was Abraham Lincoln and such was Garibaldi. And Leblanc with his transparent childish innocence, his entire self-forgetfulness, came into this confusion of distrust and intricate disaster with an invincible appeal for the manifest sanities of the situation. His voice when he spoke was "full of remonstrance." He was a little, bald, spectacled man, inspired by that intellectual idealism which has been one of the peculiar gifts of France to humanity. He was possessed of one clear persuasion, that war must end and that the only way to end war was to have but one government for mankind. He brushed

aside all other considerations. At the very outbreak of the war, so soon as the two capitals of the belligerents had been wrecked, he went to the president in the White House with this proposal. He made it as if it was a matter of course. He was fortunate to be in Washington and in touch with that gigantic childishness which was the characteristic of the American imagination. For the Americans also were among the simple peoples by whom the world was saved. He won over the American president and the American government to his general ideas ; at any rate they supported him sufficiently to give him a standing with the more sceptical European governments, and with this backing he set to work—it seemed the most fantastic of enterprises—to bring together all the rulers of the world and unify them. He wrote innumerable letters, he sent messages, he went desperate journeys, he enlisted whatever support he could find ; no one was too humble for an ally or too obstinate for his advances ; through the terrible autumn of the last wars this persistent little visionary in spectacles must have seemed rather like a hopeful canary twittering during a thunderstorm. And no accumulation of disasters daunted his conviction that they could be ended.

For the whole world was flaring then into a monstrous phase of destruction. Power after power about the armed globe sought to anticipate attack by aggression. They went to war in a delirium of panic, in order to use their bombs first. China and Japan had assailed Russia and destroyed Moscow, the United States had attacked Japan, India was in anarchistic revolt with Delhi a pit of fire spouting death and flame : the redoubtable King of the Balkans was mobilising. It must have seemed plain at last to every one in those days that the world was slipping headlong to anarchy. By the spring of 1959 from nearly two hundred centres, and every week added to their number, roared the unquenchable crimson conflagrations of the atomic bombs ; the flimsy fabric of the world's credit had vanished, industry was completely disorganised and every city, every thickly populated area, was starving or trembled on the verge of starvation. Most of the capital cities of the world were burning ; millions of people had already perished, and over great areas government was at an end. Humanity has been compared by one contemporary writer to a sleeper who handles matches in his sleep and wakes to find himself in flames.

For many months it was an open question whether there was to be found throughout all the race the will and intelligence to face these new conditions and make even an attempt to arrest the downfall of the social order. For a time the war spirit defeated every effort to rally the forces of preservation and construction. Leblanc seemed to be protesting against earthquakes, and as likely to find a spirit of reason in the

crater of Etna. Even though the shattered official governments now clamoured for peace, bands of irreconcilables and invincible patriots, usurpers, adventurers and political desperadoes were everywhere in possession of the simple apparatus for the disengagement of atomic energy and the initiation of new centres of destruction. The stuff exercised an irresistible fascination upon a certain type of mind. Why should any one give in while he can still destroy his enemies? Surrender? While there is still a chance of blowing them to dust? The power of destruction which had once been the ultimate privilege of government was now the only power left in the world—and it was everywhere. There were few thoughtful men during that phase of blazing waste who did not pass through such moods of despair as Barnet describes, and declare with him: "This is the end. . . ."

And all the while Leblanc was going to and fro with glittering glasses and an inexhaustible persuasiveness urging the manifest reasonableness of his view upon ears that ceased presently to be inattentive. Never at any time did he betray a doubt that all this chaotic conflict would end. No nurse during a nursery uproar was ever so certain of the inevitable ultimate peace. From being treated as an amiable dreamer he came by insensible degrees to be regarded as an extravagant possibility. Then he began to seem even practicable. The people who listened to him in 1958 with a smiling impatience were eager before 1959 was four months old to know just exactly what he thought might be done. He answered with the patience of a philosopher and the lucidity of a Frenchman. He began to receive responses of a more and more hopeful type. He came across the Atlantic to Italy, and there he gathered in the promises for this congress. He chose those high meadows above Brissago for the reasons we have stated. "We must get away," he said, "from old associations." He set to work requisitioning material for his conference with an assurance that was justified by the replies. With a slight incredulity the conference which was to begin a new order in the world gathered itself together. Leblanc summoned it without arrogance, he controlled it by virtue of an infinite humility. Men appeared upon those upland slopes with the apparatus for wireless telegraphy; others followed with tents and provisions; a little cable was flung down to a convenient point upon the Locarno road below. Leblanc arrived, sedulously directing every detail that would affect the tone of the assembly. He might have been a courier in advance rather than the originator of the gathering. And then there arrived, some by the cable, most by aeroplane, a few in other fashions, the men who had been called together to confer upon the state of the world. It was to be a conference without a name. Nine monarchs, the presidents of four republics, a number of ministers and ambassadors, powerful journalists, and such-like

prominent and influential men took part in it. There were even scientific men; and that world-famous old man Holsten came with the others to contribute his amateur statecraft to the desperate problem of the age. Only Leblanc would have dared so to summon figureheads and powers and intelligence, or have had the courage to hope for their agreement. . . .

§ 2

And one at least of those who were called to this conference of governments came to it on foot. This was King Egbert, the young king of the most venerable kingdom in Europe. He was a rebel and had always been of deliberate choice a rebel against the magnificence of his position. He affected long pedestrian tours and a disposition to sleep in the open air. He came now over the Pass of Sta Maria Maggiore and by boat up the lake to Brissago; thence he walked up the mountain, a pleasant path set with oaks and sweet chestnut. For provision on the walk, for he did not want to hurry, he carried with him a pocketful of bread and cheese. A certain small retinue that was necessary to his comfort and dignity upon occasions of state he sent on by the cable car, and with him walked his private secretary, Firmin, a man who had thrown up the Professorship of World Politics in the London School of Sociology, Economics and Political Science, to take up these duties. Firmin was a man of strong rather than rapid thought, he had anticipated great influence in this new position, and after some years he was still only beginning to apprehend how largely his function was to listen. Originally he had been something of a thinker upon international politics, an authority upon tariffs and strategy and a valued contributor to various of the higher organs of public opinion, but the atomic bombs had taken him by surprise and he had still to recover completely from his pre-atomic opinions and the silencing effect of those sustained explosives.

The king's freedom from the trammels of etiquette was very complete. In theory—and he abounded in theory—his manners were purely democratic. It was by sheer habit and inadvertency that he permitted Firmin, who had discovered a rucksack in a small shop in the town below, to carry both bottles of beer. The king had never as a matter of fact carried anything for himself in his life, and he had never noted that he did not do so.

"We will have nobody with us," he said, "at all. We will be perfectly simple."

So Firmin carried the beer.

As they walked up—it was the king made the pace rather than Firmin—they talked of the conference before them, and Firmin, with a certain want of assurance that would have surprised him in himself in the days of his Professorship, sought

to define the policy of his companion. "In its broader form, sir," said Firmin, "I admit a certain plausibility in this project of Leblanc's, but I feel that although it may be advisable to set up some sort of general control for International affairs—a sort of Hague Court with extended powers—that is no reason whatever for losing sight of the principles of national and imperial autonomy."

"Firmin," said the king, "I am going to set my brother kings a good example."

Firmin intimated a curiosity that veiled a dread.

"By chucking all that nonsense," said the king.

He quickened his pace as Firmin, who was already a little out of breath, betrayed a disposition to reply.

"I am going to chuck all that nonsense," said the king as Firmin prepared to speak. "I am going to fling my royalty and empire on the table—and declare at once I don't mean to haggle. It's haggling—about rights—has been the devil in human affairs, for—always. I am going to stop this nonsense."

Firmin halted abruptly. "But, sir!" he cried.

The king stopped six yards ahead of him and looked back at his adviser's perspiring visage.

"Do you really think, Firmin, that I am here as—as an infernal politician to put my crown and my flag and my claims and so forth in the way of peace? That little Frenchman is right. You know he is right as well as I do. Those things are over. We—we kings and rulers and representatives have been at the very heart of the mischief. Of course we imply separation, and of course separation means the threat of war, and of course the threat of war means the accumulation of more and more atomic bombs. The old game's up. But I say, we mustn't stand here, you know. The world waits. Don't you think the old game's up, Firmin?"

Firmin adjusted a strap, passed a hand over his wet forehead and followed earnestly. "I admit, sir," he said to a receding back, "that there has to be some sort of hegemony, some sort of Amphictyonic council——"

"There's got to be one simple government for all the world," said the king over his shoulder.

"But as for a reckless unqualified abandonment, sir——"

"*Bang!*" cried the king.

Firmin made no answer to this interruption. But a faint shadow of annoyance passed across his heated features.

"Yesterday," said the king by way of explanation, "the Japanese very nearly got San Francisco."

"I hadn't heard, sir."

"The Americans ran the Japanese aeroplane down into the sea and there the bomb got busted."

"Under the sea, sir?"

"Yes. Submarine volcano. The steam is in sight of the

Californian coast. It was as near as that. And with things like this happening, you want me to go up this hill and haggle. Consider the effect of that upon my imperial cousin—and all the others ! "

" *He* will haggle, sir."

" Not a bit of it," said the king.

" But, sir."

" Leblanc won't let him."

Firmin halted abruptly, and gave a vicious pull at the offending strap. " Sir, he will listen to his advisers," he said in a tone that in some subtle way seemed to implicate his master with the trouble of the knapsack.

The king considered him.

" We will go just a little higher," he said. " I want to find this unoccupied village they spoke of, and then we will drink that beer. It can't be far. We will drink the beer and throw away the bottles. And then, Firmin, I shall ask you to look at things in a more generous light. . . . Because, you know, you must. . . ."

He turned about and for some time the only sound they made was the noise of their boots upon the loose stones of the way and the irregular breathing of Firmin.

At length, as it seemed to Firmin, or quite soon, as it seemed to the king, the gradient of the path diminished, the way widened out, and they found themselves in a very beautiful place indeed. It was one of those upland clusters of sheds and houses that are still to be found in the mountains of North Italy, buildings that were used only in the high summer, and which it was the custom to leave locked up and deserted through all the winter and spring and up to the middle of June. The buildings were of a soft-toned grey stone, buried in rich green grass, shadowed by chestnut-trees and lit by an extraordinary blaze of yellow broom. Never had the king seen broom so glorious ; he shouted at the light of it, for it seemed to give out more sunlight even than it received ; he sat down impulsively on a lichenous stone, tugged out his bread and cheese, and bade Firmin thrust the beer into the shaded weeds to cool.

" The things people miss, Firmin," he said, " who go up into the air in ships ! "

Firmin looked around him with an ungenial eye. " You see it at its best, sir," he said, " before the peasants come here again and make it filthy."

" It would be beautiful anyhow," said the king.

" Superficially, sir," said Firmin. " But it stands for a social order that is fast vanishing away. Indeed, judging by the grass between the stones and in the huts, I am inclined to doubt if it is in use even now."

" I suppose," said the king, " they would come up immediately the hay on this flower meadow is cut. It would be

those slow, creamy-coloured beasts, I expect, one sees on the roads below, and swarthy girls with red handkerchiefs over their black hair. . . . It is wonderful to think how long that beautiful old life lasted. In the Roman times and long ages before ever the rumour of the Romans had come into these parts, men drove their cattle up into these places as the summer came on. . . . How haunted is this place! There have been quarrels here, hopes, children have played here and lived to be old crones and old gaffers and died, and so it has gone on for thousands of lives. Lovers, innumerable lovers, have caressed amidst this golden broom. . . ."

He meditated over a busy mouthful of bread and cheese.

"We ought to have brought a tankard for that beer," he said.

Firmin produced a folding aluminium cup, and the king was pleased to drink.

"I wish, sir," said Firmin suddenly, "I could induce you at least to delay your decision——"

"It's no good talking, Firmin," said the king. "My mind's as clear as daylight."

"Sire," protested Firmin, with his voice full of bread and cheese and genuine emotion, "have you no respect for your kingship?"

The king paused before he answered with unwonted gravity. "It's just because I have, Firmin, that I won't be a puppet in this game of international politics." He regarded his companion for a moment and then remarked: "Kingship!—what do *you* know of kingship, Firmin?

"Yes," cried the king to his astonished counsellor. "For the first time in my life I am going to be a king. I am going to lead, and lead by my own authority. For a dozen generations my family has been a set of dummies in the hands of their advisers. Advisers! Now I am going to be a real king—and I am going to—to abolish, dispose of, finish, the crown to which I have been a slave. But what a world of paralysing shams this roaring stuff has ended! The rigid old world is in the melting-pot again, and I, who seemed to be no more than the stuffing inside a regal robe, I am a king among kings. I have to play my part at the head of things and put an end to blood and fire and idiot disorder."

"But, sir," protested Firmin.

"This man Leblanc is right. The whole world has got to be a Republic, one and indivisible. You know that, and my duty is to make that easy. A king should lead his people; you want me to stick on their backs like some Old Man of the Sea. To-day must be a sacrament of kings. Our trust for mankind is done with and ended. We must part our robes among them, we must part our kingship among them and say to them all, now the king in every one must rule the world. . . . Have you no sense of the magnificence of this

occasion? You want me, Firmin, you want me to go up there and haggle like a damned little solicitor for some price, some compensation, some qualification. . . ."

Firmin shrugged his shoulders and assumed an expression of despair. Meanwhile, he conveyed, one must eat.

For a time neither spoke, and the king ate and turned over in his mind the phrases of the speech he intended to make to the conference. By virtue of the antiquity of his crown he was to preside, and he intended to make his presidency memorable. Reassured of his eloquence, he considered the despondent and sulky Firmin for a space.

"Firmin," he said, "you have idealised kingship."

"It has been my dream, sir," said Firmin, sorrowfully, "to serve."

"At the levers, Firmin," said the king.

"You are pleased to be unjust," said Firmin, deeply hurt.

"I am pleased to be getting out of it," said the king.

"Oh, Firmin," he went on, "have you no thought for me? Will you never realise that I am not only flesh and blood but an imagination—with its rights. I am a king in revolt against that fetter they put upon my head. I am a king awake. My reverend grandparents never in all their august lives had a waking moment. They loved the job that you, you advisers, gave them; they never had a doubt of it. It was like giving a doll to a woman who ought to have a child. They delighted in processions and opening things and being read addresses to, and visiting triplets and nonagenarians and all that sort of thing. Incredibly. They used to keep albums of cuttings from all the illustrated papers showing them at it, and if the press-cutting parcels grew thin they were worried. It was all that ever worried them. But there is something atavistic in me; I hark back to unconstitutional monarchs. They christened me too retrogressively, I think. I wanted to get things done. I was bored. I might have fallen into vice, most intelligent and energetic princes do, but the palace precautions were unusually thorough. I was brought up in the purest court the world has ever seen. . . . Alertly pure. . . . So I read books, Firmin, and went about asking questions. The thing was bound to happen to one of us sooner or later. Perhaps, too, very likely I'm not vicious. I don't think I am."

He reflected. "No," he said.

Firmin cleared his throat. "I don't think you are, sir," he said. "You prefer——"

He stopped short. He had been going to say "talking." He substituted "ideas."

"That world of royalty!" the king went on. "In a little while no one will understand it any more. It will become a riddle. . . .

"Among other things it was a world of perpetual best

clothes. Everything was in its best clothes for us and usually wearing bunting. With a cinema watching to see we took it properly. If you are a king, Firmin, and you go and look at a regiment it instantly stops whatever it is doing, changes into full uniform and presents arms. When my august parents went in a train the coal in the tender used to be whitened. It did, Firmin, and if coal had been white instead of black I have no doubt the authorities would have blackened it. That was the spirit of our treatment. People were always walking about with their faces to us. One never saw anything in profile. One got an impression of a world that was insanely focussed on ourselves. And when I began to poke my little questions into the Lord Chancellor and the archbishop and all the rest of them, about what I should see if people turned round, the general effect I produced was that I wasn't by any means displaying the Royal Tact they had expected of me. . . ."

He meditated for a time.

"And yet you know there is something in this kingship, Firmin. It stiffened up my august little grandfather. It gave my grandmother a kind of awkward dignity even when she was cross—and she was very often cross. They both had a profound sense of responsibility. My poor father's health was wretched during his brief career; nobody outside the circle knows just how he screwed himself up to things. 'My people expect it,' he used to say of this tiresome duty or that. Most of the things they made him do were silly—it was part of a bad tradition, but there was nothing silly in the way he set about them. . . . The spirit of kingship is a fine thing, Firmin; I feel it in my bones; I do not know what I might not be if I were not a king. I could die for my people, Firmin, and you couldn't. No, don't say you could die for me, because I know better. Don't think I forget my kingship, Firmin, don't imagine that. I am a king, a kingly king, by right divine. The fact that I am also a chattering young man makes not the slightest difference to that. But the proper text-book for kings, Firmin, is none of the Court memoirs and Welt-Politik books you would have me read; it is old Frazer's *Golden Bough*. Have you read that, Firmin?"

Firmin had.

"Those were the authentic kings. In the end they were cut up and a bit given to everybody. They sprinkled the nations—with Kingship."

Firmin turned himself round and faced his royal master.

"What do you intend to do, sir?" he asked. "If you will not listen to me, what do you propose to do this afternoon?"

The king flicked crumbs from his coat.

"Manifestly war has to stop for ever, Firmin. Manifestly this can only be done by putting all the world under one

government. Our crowns and flags are in the way. Manifestly they must go."

"Yes, sir," interrupted Firmin, "but *what* government? I don't see what government you get by a universal abdication!"

"Well," said the king with his hands about his knees, "*We* shall be the government."

"The conference?" exclaimed Firmin.

"Who else?" asked the king simply.

"It's perfectly simple," he added to Firmin's tremendous silence.

"But," cried Firmin, "you must have sanctions! Will there be no form of election, for example?"

"Why should there be?" asked the king with intelligent curiosity.

"The consent of the governed."

"Firmin, we are just going to lay down our differences and take over government. Without any election at all. Without any sanction. The governed will show their consent by silence. If any effective opposition arises we shall ask it to come in and help. The true sanction of kingship is the grip upon the sceptre. We aren't going to worry people to vote for us. I'm certain the mass of men does not want to be bothered with such things. . . . We'll contrive a way for any one interested to join in. That's quite enough in the way of democracy. Perhaps later—when things don't matter. . . . We shall govern all right, Firmin. Government only becomes difficult when the lawyers get hold of it, and since these troubles began the lawyers are shy. Indeed, come to think of it, I wonder where all the lawyers are. . . . Where are they? A lot of course were bagged, some of the worst ones, when they blew up my legislature. You never knew the late Lord Chancellor. . . .

"Necessities bury rights. And create them. Lawyers live on dead rights disinterred. . . . We've done with that way of living. We won't have more law than a code can cover and beyond that government will be free. . . .

"Before the sun sets to-day, Firmin, trust me, we shall have made our abdications, all of us, and declared the World Republic, supreme and indivisible. I wonder what my august grandmother would have made of it! All my rights! . . . And then we shall go on governing. What else is there to do? All over the world we shall declare that there is no longer mine or thine but ours. China, the United States, two-thirds of Europe, will certainly fall in and obey. They will have to do so. What else can they do? Their official rulers are here with us. They won't be able to get together any sort of idea of not obeying us. . . . Then we shall declare that every sort of property is held in trust for the Republic. . . ."

"But, sir!" cried Firmin, suddenly enlightened. "Has this been arranged already?"

"My dear Firmin, do you think we have come here, all of us, to talk at large? The talking has been done for half a century. Talking and writing. We are here to set the new thing, the simple obvious necessary thing, going."

He stood up.

Firmin, forgetting the habits of a score of years, remained seated.

"*Well*," he said at last. "And I have known nothing!"

The king smiled very cheerfully. He liked these talks with Firmin.

§ 3

That conference upon the Brissago meadows was one of the most heterogeneous collections of prominent people that has ever met together. Principalities and powers, stripped and shattered until all their pride and mystery were gone, met in a marvellous new humility. Here were kings and emperors whose capitals were lakes of flaming destruction, statesmen whose countries had become chaos, scared politicians and financial potentates. Here were leaders of thought and learned investigators dragged reluctantly to the control of affairs. Altogether there were ninety-three of them, Leblanc's conception of the head men of the world. They had all come to the realisation of the simple truths that the indefatigable Leblanc had hammered into them; and, drawing his resources from the King of Italy, he had provisioned his conference with a generous simplicity quite in accordance with the rest of his character, and so at last was able to make his astonishing and entirely rational appeal. He had appointed King Egbert the president, he believed in this young man so firmly that he completely dominated him, and he spoke himself as a secretary might speak from the president's left hand and evidently did not realise himself that he was telling them all exactly what they had to do. He imagined he was merely recapitulating the obvious features of the situation for their convenience. He was dressed in ill-fitting white silk clothes, and he consulted a dingy little packet of notes as he spoke. They put him out. He explained that he had never spoken from notes before, but that this occasion was exceptional.

And then King Egbert spoke as he was expected to speak, and Leblanc's spectacles moistened at that flow of generous sentiment, most amiably and lightly expressed. "We haven't to stand on ceremony," said the king, "we have to govern the world. We have always pretended to govern the world and here is our opportunity."

"Of course," whispered Leblanc, nodding his head rapidly, "of course."

"The world has been smashed up, and we have to put it on its wheels again," said King Egbert. "And it is the simple common sense of this crisis for all to help and none to seek advantage. Is that our tone or not?"

The gathering was too old and seasoned and miscellaneous for any great displays of enthusiasm, but that was its tone; and with an astonishment that somehow became exhilarating it began to resign, repudiate, and declare its intentions. Firmin, taking notes behind his master, heard everything that had been foretold among the yellow broom come true. With a queer feeling that he was dreaming he assisted at the proclamation of the World State, and saw the message taken out to the wireless operators to be throbbed all round the habitable globe. "And next," said King Egbert with a cheerful excitement in his voice, "we have to get every atom of Carolinum and all the plant for making it into our control. . . ."

Firmin was not alone in his incredulity. Not a man there who was not a very amiable, reasonable, benevolent creature at bottom; some had been born to power and some had happened upon it, some had struggled to get it, not clearly knowing what it was and what it implied, but none was irreconcilably set upon its retention at the price of cosmic disaster. Their minds had been prepared by circumstances and sedulously cultivated by Leblanc; and now they took the broad obvious road along which King Egbert was leading them, with a mingled conviction of strangeness and necessity. Things went very smoothly; the King of Italy explained the arrangements that had been made for the protection of the camp from any fantastic attack; a couple of thousand of aeroplanes, each carrying a sharpshooter, guarded them, and there was an excellent system of relays and at night all the sky would be searched by scores of lights, and the admirable Leblanc gave luminous reasons for their camping just where they were and going on with their administrative duties forthwith. He knew of this place because he had happened upon it when holiday-making with Madame Leblanc twenty years and more ago. "There is very simple fare at present," he explained, "on account of the disturbed state of the countries about us. But we have excellent fresh milk, good red wine, beef, bread, salad, and lemons. . . . In a few days I hope to place things in the hands of a more efficient caterer. . . ."

The members of the new world government dined at three long tables on trestles, and down the middle of these tables Leblanc in spite of the barrenness of his menu had contrived to have a great multitude of beautiful roses. There was similar accommodation for the secretaries and attendants at a lower level down the mountain. The assembly dined as it had debated, in the open air, and over the dark crags to the west the glowing June sunset shone upon the banquet. There was no precedency now among the ninety-three, and King

Egbert found himself between a pleasant little Japanese stranger in spectacles and his cousin of Central Europe, and opposite a great Bengali leader and the President of the United States of America. Beyond the Japanese was Holsten, the old chemist, and Leblanc was a little way down the other side.

The king was still cheerfully talkative and abounded in ideas. He fell presently into an amiable controversy with the American, who seemed to feel a lack of impressiveness in the occasion.

It was ever the Transatlantic tendency, due no doubt to the necessity of handling public questions in a bulky and striking manner, to overemphasise and overaccentuate, and the president was touched by his national failing. He suggested now that there should be a new era, starting from that day as the first day of the first year.

The king demurred.

"From this day forth, sir, man enters upon his heritage," said the American.

"Man," said the king, "is always entering upon his heritage. You Americans have a peculiar weakness for anniversaries—if you will forgive me saying so. Yes—I accuse you of a lust for dramatic effect. Everything is happening always, but you want to say this or this is the real instant in time and subordinate all the others to it."

The American said something about an epoch-making day.

"But surely," said the king, "you don't want us to condemn all humanity to a world-wide annual Fourth of July for ever and evermore. On account of this harmless necessary day of declarations. No conceivable day could ever deserve that. Ah! you do not know, as I do, the devastations of the memorable. My poor grandparents were—*rubricated*. The worst of these huge celebrations is that they break up the dignified succession of one's contemporary emotions. They interrupt. They set back. Suddenly out come the flags and fireworks and the old enthusiasms are furbished up—and it's sheer destruction of the proper thing that ought to be going on. Sufficient unto the day is the celebration thereof. Let the dead past bury its dead. You see in regard to the calendar I am for democracy and you are for aristocracy. All things I hold are august and have a right to be lived through on their merits. No day should be sacrificed on the grave of departed events. What do you think of it, Wilhelm?"

"For the noble, yes, all days should be noble."

"Exactly my position," said the king, and felt pleased at what he had been saying.

And then, since the American pressed his idea, the king contrived to shift the talk from the question of celebrating the epoch they were making to the question of the probabilities that lay ahead. Here every one became diffident. They could see the world unified and at peace, but what detail

was to follow from that unification they seemed indisposed to discuss. This diffidence struck the king as remarkable. He plunged upon the possibilities of science. All the huge expenditure that had hitherto gone into unproductive naval and military preparations must now, he declared, place research upon a new footing. "Where one man worked we will have a thousand." He appealed to Holsten. "We have only begun to peep into these possibilities," he said. "You at any rate have sounded the vaults of the treasure-house."

"They are unfathomable," smiled Holsten.

"Man," said the American with a manifest resolve to justify and reinstate himself after the flickering contradictions of the king, "Man, I say, is only beginning to enter upon his heritage."

"Tell us some of the things you believe we shall presently learn, give us an idea of the things we may presently do," said the king to Holsten.

Holsten opened out the vistas. . . .

"Science," the king cried presently, "is the new king of the world."

"*Our* view," said the president, "is that sovereignty resides with the people."

"No!" said the king, "the sovereign is a being more subtle than that. And less arithmetical. Neither my family nor your emancipated people. It is something that floats about us, and above us, and through us. It is that common impersonal will and sense of necessity of which Science is the best understood and most typical aspect. It is the mind of the race. It is that which has brought us here, which has bowed us all to its demands. . . ."

He paused and glanced down the table at Leblanc and then re-opened at his former antagonist.

"There is a disposition," said the king, "to regard this gathering as if it were actually doing what it appears to be doing, as if we ninety-odd men of our own free will and wisdom were unifying the world. There is a temptation to consider ourselves exceptionally fine fellows, and masterful men, and all the rest of it. We are not. I doubt if we should average out as anything abler than any other casually selected body of ninety-odd men. We are no creators, we are consequences, we are salvagers—or salvagees. The thing to-day is not ourselves but the wind of conviction that has blown us hither. . . ."

The American had to confess he could hardly agree with the king's estimate of their average.

"Holsten perhaps and one or two others might lift us a little," the king conceded. "But the rest of us?"

His eyes flitted once more towards Leblanc.

"Look at Leblanc," he said. "He's just a simple soul. There are hundreds and thousands like him. I admit a

certain dexterity, a certain lucidity ; but there is not a country town in France where there is not a Leblanc or so to be found about two o'clock in its principal café. It's just that he isn't complicated or Super-Mannish or any of those things that has made all he has done possible. But in happier times, don't you think, Wilhelm, he would have remained just what his father was, a successful *épicier*, very clean, very accurate, very honest. And on holidays he would have gone out with Madame Leblanc and her knitting in a punt with a jar of something gentle, and have sat under a large reasonable green-lined umbrella and fished very neatly and successfully for gudgeon. . . ."

The president and the Japanese prince in spectacles protested together.

"If I do him an injustice," said the king, "it is only because I want to elucidate my argument. I want to make it clear how small are men and days, and how great is man in comparison. . . ."

§ 4

So it was King Egbert talked at Brissago after they had proclaimed the unity of the world. Every evening after that the assembly dined together and talked at their ease and grew accustomed to each other and sharpened each other's ideas, and every day they worked together and really for a time believed that they were inventing a new government for the world. They discussed a constitution. But there were matters needing attention too urgently to wait for any constitution. They attended to these incidentally. The constitution it was that waited. It was presently found convenient to keep the constitution waiting indefinitely as King Egbert had foreseen, and meanwhile with an increasing self-confidence, that council went on governing. . . .

On this first evening of all the council's gatherings, after King Egbert had talked for a long time and drunken and praised very abundantly the simple red wine of the country that Leblanc had procured for them, he gathered about him a group of congenial spirits and fell into a discourse upon simplicity, praising it above all things and declaring that the ultimate aim of art, religion, philosophy, and science alike was to simplify. He instanced himself as a devotee to simplicity. And Leblanc he instanced as a crowning instance of the splendour of this quality. Upon that they all agreed.

When at last the company about the tables broke up, the king found himself brimming over with a peculiar affection and admiration for Leblanc, he made his way to him and drew him aside and broached what he declared was a small matter. There was, he said, a certain order in his gift that, unlike all other orders and decorations in the world, had

never been corrupted. It was reserved for elderly men of supreme distinction, the acuteness of whose gifts was already touched to mellowness, and it had included the greatest names of every age so far as the advisers of his family had been able to ascertain them. At present, the king admitted, these matters of stars and badges were rather obscured by more urgent affairs, for his own part he had never set any value upon them at all, but a time might come when they would be at least interesting, and in short he wished to confer the Order of Merit upon Leblanc. His sole motive in doing so, he added, was his strong desire to signalise his personal esteem. He laid his hand upon the Frenchman's shoulder as he said these things with an almost brotherly affection. Leblanc received this proposal with a modest confusion that greatly enhanced the king's opinion of his admirable simplicity. He pointed out that eager as he was to snatch at the proffered distinction, it might at the present stage appear invidious, and he therefore suggested that the conferring of it should be postponed until it could be made the crown and conclusion of his services. The king was unable to shake this resolution, and the two men parted with expressions of mutual esteem.

The king then summoned Firmin in order to make a short note of a number of things that he had said during the day. But after about twenty minutes' work the sweet sleepiness of the mountain air overcame him, and he dismissed Firmin and went to bed and fell asleep at once, and slept with extreme satisfaction. He had had an active agreeable day.

§ 5

The establishment of the new order that was thus so humanly begun was, if one measures it by the standard of any preceding age, a rapid progress. The fighting spirit of the world was exhausted. Only here or there did fierceness linger. For long decades the combative side in human affairs had been monstrously exaggerated by the accidents of political separation. This now became luminously plain. An enormous proportion of the force that sustained armaments had been nothing more aggressive than the fear of war and warlike neighbours. It is doubtful if any large section of the men actually enlisted for fighting ever at any time really hungered and thirsted for bloodshed and danger. That kind of appetite was probably never very strong in the species after the savage stage was past. The army was a profession in which killing had become a disagreeable possibility rather than an eventful certainty. If one reads the old newspapers and periodicals of that time, which did so much to keep militarism alive, one finds very little about glory and adventure and a constant harping on the disagreeableness of invasion and subjugation. In one word militarism was funk.

The belligerent resolution of the armed Europe of the twentieth century was the resolution of a fiercely frightened sheep to plunge. And now that its weapons were exploding in its hands Europe was only too eager to drop them, and abandon this fancied refuge of violence.

For a time the whole world had been shocked into frankness ; nearly all the clever people who had hitherto sustained the ancient belligerent separations had now been brought to realise the need for simplicity of attitude and openness of mind ; and in this atmosphere of moral renascence there was little attempt to get negotiable advantages out of resistance to the new order. Human beings are foolish enough no doubt, but few have stopped to haggle in a fire escape. The council had its way with them. The band of " patriots " who seized the laboratories and arsenal just outside Osaka and tried to rouse Japan to revolt against inclusion in the Republic of Mankind found they had miscalculated the national pride and met the swift vengeance of their own countrymen. That fight in the arsenal was a vivid incident in this closing chapter of the history of war. To the last the " patriots " were undecided whether in the event of a defeat they would explode their supply of atomic bombs or not. They were fighting with swords outside the iridium doors, and the moderates of their number were at bay and on the verge of destruction, only ten indeed remained unwounded, when the republicans burst in to the rescue. . . .

§ 6

One single monarch held out against the general acquiescence in the new rule, and that was that strange survival of mediævalism, the " Slavic Fox," the King of the Balkans. He debated and delayed his submissions. He showed an extraordinary combination of cunning and temerity in his evasion of the repeated summonses from Brissago. He affected ill-health and a great preoccupation with his new official mistress, for his semibarbaric court was arranged on the best romantic models. His tactics were ably seconded by Doctor Pestovitch, his chief minister. Failing to establish his claims to complete independence King Ferdinand Charles annoyed the conference by a proposal to be treated as a protected state. Finally he professed an unconvincing submission, and put a mass of obstacles in the way of the transfer of his national officials to the new government. In these things he was enthusiastically supported by his subjects, still for the most part an illiterate peasantry, passionately if confusedly patriotic and so far with no practical knowledge of the effect of atomic bombs. More particularly he retained control of all the Balkan aeroplanes.

For once the extreme naïveté of Leblanc seems to have

been mitigated by duplicity. He went on with the general pacification of the world as if the Balkan submission was made in absolute good faith, and he announced the disbandment of the force of aeroplanes that hitherto guarded the council at Brissago upon the approaching fifteenth of July. But instead he doubled the number upon duty on that eventful day, and made various arrangements for their disposition. He consulted certain experts, and when he took King Egbert into his confidence there was something in his neat and explicit foresight that brought back to that ex-monarch's mind his half-forgotten fantasy of Leblanc as a fisherman under a green umbrella.

About five o'clock in the morning of the seventeenth of July one of the outer sentinels of the Brissago fleet, which was soaring unobtrusively over the lower end of the lake of Garda, sighted and hailed a strange aeroplane that was flying westward and, failing to get a satisfactory reply, set its wireless apparatus talking and gave chase. A swarm of consorts appeared very promptly over the westward mountains, and before the unknown aeroplane had sighted Como, it had a dozen eager attendants closing in upon it. Its driver seems to have hesitated, dropped down among the mountains and then turned southward in flight, only to find an intercepting biplane sweeping across his bows. He then went round into the eye of the rising sun, and passed within a hundred yards of his original pursuer.

The sharpshooter therein opened fire at once, and showed an intelligent grasp of the situation by disabling the passenger first. The man at the wheel must have heard his companion cry out behind him, but he was too intent on getting away to waste even a glance behind. Twice after that he must have heard shots. He let his engine go, he crouched down, and for twenty minutes he must have steered in the continual expectation of a bullet. It never came, and when at last he glanced round three great planes were close upon him, and his companion, thrice hit, lay dead across his bombs. His followers manifestly did not mean either to upset or shoot him, but inexorably they drove him down, down. At last he was curving and flying a hundred yards or less over the level fields of rice and maize. Ahead of him and dark against the morning sunrise was a village with a very tall and slender campanile and a line of cable bearing metal standards that he could not clear. He stopped his engine abruptly and dropped flat. He may have hoped to get at the bombs when he came down, but his pitiless pursuers drove right over him and shot him as he fell.

Three other aeroplanes curved down and came to rest amidst grass close by the smashed machine. Their passengers descended, and ran holding their light rifles in their hands towards the débris and the two dead men. The coffin-shaped

box that had occupied the centre of the machine had broken, and three black objects, each with two handles like the ears of a pitcher, lay peacefully amidst the litter.

These objects were so tremendously important in the eyes of their captors that they disregarded the two dead men who lay bloody and broken amidst the wreckage as they might have disregarded dead frogs by a country pathway.

"By God," cried the first. "Here they are!"

"And unbroken!" said the second.

"I've never seen the things before," said the first.

"Bigger than I thought," said the second.

The third comer arrived. He stared for a moment at the bombs and then turned his eyes to the dead man with a crushed chest who lay in a muddy place among the green stems under the centre of the machine.

"One can take no risks," he said with a faint suggestion of apology.

The other two now also turned to the victims. "We must signal," said the first man. A shadow passed between them and the sun and they looked up to see the aeroplane that had fired the last shot. "Shall we signal?" came a megaphone hail.

"Three bombs," they answered together.

"Where do they come from?" asked the megaphone.

The three sharpshooters looked at each other and then moved towards the dead men. One of them had an idea. "Signal that first," he said, "while we look." They were joined by their aviators for the search, and all six men began a hunt that was necessarily brutal in its haste, for some indication of identity. They examined the men's pockets, their blood-stained clothes, the machine, the framework. They turned the bodies over and flung them aside. There was not a tattoo mark. . . . Everything was elaborately free of any indication of its origin.

"We can't find out!" they called at last.

"Not a sign?"

"Not a sign."

"I'm coming down," said the man overhead. . . .

§ 7

The Slavic Fox stood upon a metal balcony in his picturesque Art Nouveau palace that gave upon the precipice that overhung his bright little capital, and beside him stood Pestovitch, grizzled and cunning and now full of an ill-suppressed excitement. Behind them the window opened into a large room, richly decorated in aluminium and crimson enamel, across which the king, as he glanced ever and again over his shoulder with a gesture of inquiry, could see through the two open doors of a little azure-walled ante-chamber the wireless

operator in the turret working at his incessant transcription. Two pompously uniformed messengers waited listlessly in this apartment. The room was furnished with a stately dignity, and had in the middle of it a big green baize-covered table with the massive white metal ink-pots and antiquated sand-boxes natural to a new but romantic monarchy. It was the king's council-chamber and about it now, in attitudes of suspended intrigue, stood the half-dozen ministers who constituted his cabinet. They had been summoned for twelve o'clock, but still at half-past twelve the king loitered in the balcony and seemed to be waiting for some news that did not come.

The king and his minister had talked at first in whispers ; they had fallen silent, for they found little now to express except a vague anxiety. Away there on the mountain-side were the white metal roofs of the long farm-buildings beneath which the bomb factory and the bombs were hidden. (The chemist who had made all these for the king had died suddenly after the declaration of Brissago.) Nobody knew of that store of mischief now but the king and his adviser and three heavily faithful attendants ; the aviators who waited now in the midday blaze with their bomb-carrying machines and their passenger bomb-throwers in the exercising grounds of the motor-cyclist barracks below were still in ignorance of the position of the ammunition they were presently to take up. It was time they started if the scheme was to work as Pestovitch had planned it. It was a magnificent plan. It aimed at no less than the Empire of the World. The government of idealists and professors away there at Brissago was to be blown to fragments, and then east, west, north and south those aeroplanes would go swarming over a world that had disarmed itself, to proclaim Ferdinand Charles the new Cæsar, the Master, Lord of the Earth.

It was a magnificent plan. But the tension of this waiting for news of the success of the first blow was—considerable.

The Slavic Fox was of a pallid fairness, he had a remarkably long nose, a thick short moustache and small blue eyes that were a little too near together to be pleasant. It was his habit to worry his moustache with short nervous tugs whenever his restless mind troubled him, and now this motion was becoming so incessant that it irked Pestovitch beyond the limits of endurance.

" I will go," said the minister, " and see what the trouble is with the wireless. They give us nothing, good or bad."

Left to himself the king could worry his moustache without stint ; he leaned his elbows foward on the balcony and gave both of his long white hands to the work, so that he looked like a pale dog gnawing a bone. Suppose they caught his men, what should he do ? Suppose they caught his men ?

The clocks in the light gold-capped belfries of the town below presently intimated the half-hour after midday.

Of course he and Pestovitch had thought it out. Even if they had caught those men, they were pledged to secrecy. . . . Probably they would be killed in the catching. . . . One could deny anyhow, deny and deny.

And then he became aware of half a dozen little shining specks very high in the blue. . . .

Pestovitch came out to him presently. "The government messages, Sire, have all dropped into cipher," he said. "I have set a man——"

"*Look!*" interrupted the king, and pointed upward with a long lean finger.

Pestovitch followed that indication and then glanced for one questioning moment at the white face before him.

"We have to face it out, Sire," he said.

For some moments they watched the steep spirals of the descending messengers and then they began a hasty consultation. . . .

They decided that to be holding a council upon the details of an ultimate surrender to Brissago was as innocent-looking a thing as the king could well be doing, and so when at last the ex-king Egbert, whom the council had sent as its envoy, arrived upon the scene, he discovered the king almost theatrically posed at the head of his councillors in the midst of his court. The door upon the wireless operators was shut.

The ex-king from Brissago came like a draught through the curtains and attendants that gave a wide margin to King Ferdinand's state, and the familiar confidence of his manner belied a certain hardness in his eye. Firmin trotted behind him and no one else was with him. And as Ferdinand Charles rose to greet him, there came into the heart of the Balkan king again that same chilly feeling that he had felt upon the balcony—and it passed at the careless gestures of his guest. For surely any one might outwit this foolish talker who, for a mere idea and at the command of a little French rationalist in spectacles, had thrown away the most ancient crown in all the world.

One must deny, deny. . . .

And then slowly and quite tiresomely he realised that there was nothing to deny. His visitor, with an amiable ease, went on talking about everything in debate between himself and Brissago except——

Could it be that they had been delayed? Could it be that they had had to drop for repairs and were still uncaptured? Could it be that even now, while this fool babbled, they were over there among the mountains heaving their deadly charge over the side of the aeroplane?

Strange hopes began to lift the tail of the Slavic Fox again.

What was the man saying ? One must talk to him anyhow until one knew. At any moment the little brass door behind him might open with the news of Brissago blown to atoms. Then it would be a delightful relief to the present tension to arrest this chatterer forthwith. He might be killed perhaps. What ?

The king was repeating his observation. "They have a ridiculous fancy that your confidence is based on the possession of atomic bombs."

King Ferdinand Charles pulled himself together. He protested.

"Oh, quite so," said the ex-king, "quite so."

"What grounds ?"

The ex-king permitted himself a gesture and the ghost of a chuckle—why the devil should he chuckle ? "Practically none," he said. "But of course with these things one has to be so careful."

And then again for an instant something—like the faintest shadow of derision—gleamed out of the envoy's eyes and recalled that chilly feeling to King Ferdinand's spine.

Some kindred depression had come to Pestovitch, who had been watching the drawn intensity of Firmin's face. He came to the help of his master who, he feared, might protest too much.

"A search !" cried the king. "An embargo on our aeroplanes ?"

"Only as a temporary expedient," said the ex-king Egbert, "while the search is going on."

The king appealed to his council.

"The people will never permit it, Sire," said a bustling little man in a gorgeous uniform.

"You'll have to make 'em," said the ex-king, genially addressing all the councillors.

King Ferdinand glanced at the closed brass door through which no news would come.

"When would you want to have this search ?"

The ex-king was radiant. "We couldn't possibly do it until the day after to-morrow," he said.

"Just the capital ?"

"Where else ?" asked the ex-king still more cheerfully.

"For my own part," said the ex-king confidentially, "I think the whole business ridiculous. Who would be such a fool as to hide atomic bombs ? Nobody. Certain hanging if he's caught—certain, and almost certain blowing up if he isn't. But nowadays I have to take orders like the rest of the world. And here I am."

The king thought he had never met such detestable geniality. He glanced at Pestovitch, who nodded almost imperceptibly. It was well anyhow to have a fool to deal with. They might have sent a diplomatist. "Of course," said the king, "I

recognise the overpowering force—and a kind of logic—in these orders from Brissago."

"I knew you would," said the ex-king with an air of relief, "and so let us arrange——"

They arranged with a certain informality. No Balkan aeroplane was to adventure into the air until the search was concluded, and meanwhile the fleets of the world government would soar and circle in the sky. The towns were to be placarded with offers of reward to any one who would help in the discovery of atomic bombs. . . .

"You will sign that," said the ex-king.

"Why?"

"To show that we aren't in any way hostile to you."

Pestovitch nodded "yes" to his master.

"And then you see," said the ex-king in that easy way of his, "we'll have a lot of men here, borrow help from your police and run through all your things. And then everything will be over. Meanwhile, if I may be your guest. . . ."

When presently Pestovitch was alone with the king again, he found him in a state of jangling emotions. His spirit was tossing like a wind-whipped sea. One moment he was exalted and full of contempt for "that ass" and his search; the next he was down in a pit of dread. "They will find them, Pestovitch, and then he'll hang us."

"Hang us?"

The king put his long nose into his councillor's face. "That grinning brute *wants* to hang us," he said. "And hang us he will, if we give him a shadow of a chance."

"But all their Modern State Civilisation!"

"Do you think there's any pity in that crew of Godless, Vivisecting Prigs?" cried this last king of romance. "Do you think, Pestovitch, they understand anything of a high ambition or a splendid dream? Do you think that our gallant and sublime adventure has any appeal to them? Here am I, the last and greatest and most romantic of the Cæsars, and do you think they will miss the chance of hanging me like a dog if they can, killing me like a rat in a hole? And that renegade! He who was once an anointed king! . . .

"I hate that sort of eye that laughs and keeps hard," said the king.

"I won't sit still here and be caught like a fascinated rabbit," said the king in conclusion. "We must shift those bombs."

"Risk it," said Pestovitch. "Leave them alone."

"No," said the king. "Shift them near the frontier. Then while they watch us here—they will always watch us here now—we can buy an aeroplane abroad, and pick them up. . . ."

The king was in a feverish irritable mood all that evening, but he made his plans nevertheless with infinite cunning

They must get the bombs away ; there must be a couple of atomic hay lorries, the bombs could be hidden under the hay. . . . Pestovitch went and came, instructing trusty servants, planning and replanning. . . . The king and the ex-king talked very pleasantly of a number of subjects. All the while at the back of King Ferdinand Charles's mind fretted the mystery of his vanished aeroplane. There came no news of its capture and no news of its success. At any moment all that power at the back of his visitor might crumble away and vanish. . . .

It was past midnight when the king, in a cloak and slouch hat that might equally have served a small farmer or any respectable middle-class man, slipped out from an inconspicuous service gate on the eastward side of his palace into the thickly wooded gardens that sloped in a series of terraces down to the town. Pestovitch and his guard-valet Peter, both wrapped about in a similar disguise, came out among the laurels that bordered the pathway and joined him. It was a clear warm night, but the stars seemed unusually little and remote because of the aeroplanes, each trailing a searchlight, that drove hither and thither across the blue. One great beam had seemed to rest on the king for a moment as he came out of the palace ; then instantly and reassuringly it had swept away. But while they were still in the palace gardens another found them and looked at them.

" They see us," cried the king.

" They make nothing of us," said Pestovitch.

The king glanced up and met a calm round eye of light, that seemed to wink at him and vanish, leaving him blinded. . . .

The three men went on their way. Near the little gate in the garden railings that Pestovitch had caused to be unlocked, the king paused under the shadow of an ilex and looked back at the palace. It was very high and narrow, a twentieth-century rendering of mediævalism, mediævalism in steel and bronze and sham stone and opaque glass. Against the sky it splashed a confusion of pinnacles. High up in the eastward wing were the windows of the apartments of the ex-king Egbert. One of them was brightly lit now, and against the light a little black figure stood very still and looked out upon the night.

The king snarled.

" He little knows how we slip through his fingers," said Pestovitch.

And as he spoke they saw the ex-king stretch out his arms slowly like one who yawns, knuckle his eyes and turn inward—no doubt to his bed.

Down through the ancient winding back streets of his capital hurried the king, and at an appointed corner a shabby atomic automobile waited for the three. It was a hackney carriage

of the lowest grade, with dinted metal panels and deflated cushions. The driver was one of the ordinary drivers of the capital, but beside him sat the young secretary of Pestovitch who knew the way to the farm where the bombs were hidden.

The automobile made its way through the narrow streets of the old town, which were still lit and uneasy—for the fleet of airships overhead had kept the cafés open and people abroad—over the great new bridge and so by straggling outskirts to the country. And all through his capital the king who hoped to outdo Cæsar sat back and was very still and no one spoke. And as they got out into the dark country they became aware of the search-lights wandering over the countryside like the uneasy ghosts of giants. The king sat forward and looked at these flitting whitenesses and every now and then peered up to see the flying ships overhead.

"I don't like them," said the king.

Presently one of these patches of moonlight came to rest about them and seemed to be following their automobile. The king drew back.

"The things are confoundedly noiseless," said the king. "It's like being stalked by lean white cats."

He peered again. "That fellow is watching us," he said.

And then suddenly he gave way to panic. "Pestovitch," he said, clutching his minister's arm, "they are watching us. I'm not going through with this. They are watching us. I'm going back."

Pestovitch remonstrated. "Tell him to go back," said the king and tried to open the window. For a few moments there was a grim struggle in the automobile; a gripping of wrists and a blow. "I can't go through with it," repeated the king, "I can't go through with it."

"But they'll hang us," said Pestovitch.

"Not if we were to give up now. Not if we were to surrender the bombs. It is you who brought me into this. . . ."

At last Pestovitch compromised. There was an inn perhaps half a mile from the farm. They could alight there and the king could get brandy, and rest his nerves for a time. And if he still thought fit to go back he could go back.

"See," said Pestovitch, "the light has gone again."

The king peered up. "I believe he's following us without a light," said the king.

In the little old dirty inn the king hung doubtful for a time, and was for going back and throwing himself on the mercy of the council. "If there *is* a council," said Pestovitch. "By this time your bombs may have settled it."

"But if so, these infernal aeroplanes would go."

"They may not know yet."

"But, Pestovitch, why couldn't you do all this without me?"

Pestovitch made no answer for a moment. "I was for

leaving the bombs in their place," he said at last and went to the window. About their conveyance shone a circle of bright light. Pestovitch had a brilliant idea. "I will send my secretary out to make a kind of dispute with the driver. Something that will make them watch up above there. Meanwhile you and I and Peter will go out by the back way and up by the hedges to the farm. . . ."

It was worthy of his subtle reputation and it answered passing well.

In ten minutes they were tumbling over the wall of the farmyard, wet, muddy and breathless but unobserved. But as they ran towards the barns the king gave vent to something between a groan and a curse and all about them shone the light—and passed.

But had it passed at once or lingered for just a second?

"They didn't see us," said Peter.

"I don't think they saw us," said the king, and stared as the light went swooping up the mountain-side, hung for a second about a hay-rick and then came pouring back.

"In the barn!" cried the king.

He bruised his shin against something and then all three men were inside the huge steel-girdered barn in which stood the two motor hay lorries that were to take the bombs away. Kurt and Abel, the two brothers of Peter, had brought the lorries thither in daylight. They had the upper half of the loads of hay thrown off, ready to cover the bombs, so soon as the king should show the hiding-place. "There's a sort of pit here," said the king. "Don't light another lantern. This key of mine releases a ring. . . ."

For a time scarcely a word was spoken in the darkness of the barn. There was the sound of a slab being lifted and then of feet descending a ladder into a pit. Then whispering and then heavy breathing as Kurt came struggling up with the first of the hidden bombs.

"We shall do it yet," said the king. And then he gasped. "Curse that light. Why in the name of heaven didn't we shut the barn door?" For the great door stood wide open and all the empty lifeless yard outside and the door and six feet of the floor of the barn were in the blue glare of an inquiring search-light.

"Shut the door, Peter," said Pestovitch.

"No," cried the king too late as Peter went forward into the light. "Don't show yourself!" cried the king. Kurt made a step forward and plucked his brother back. For a time all five men stood still. It seemed that light would never go and then abruptly it was turned off, leaving them blinded. "Now," said the king uneasily, "now shut the door."

"Not completely," cried Pestovitch. "Leave a chink for us to go out by. . . ."

It was hot work shifting those bombs, and the king worke for a time like a common man. Kurt and Abel carried the great things up and Peter brought them to the carts, and the king and Pestovitch helped him to place them among the hay. They made as little noise as they could. . . .

"Ssh!" cried the king. "What's that?"

But Kurt and Abel did not hear and came blundering up the ladder with the last of the load.

"Ssh!" Peter ran forward to them with a whispered remonstrance. Now they were still.

The barn door opened a little wider and against the dim blue light outside they saw the black shape of a man.

"Any one here?" he asked, speaking with an Italian accent.

The king broke into a cold perspiration. Then Pestovitch answered. "Only a poor farmer loading hay," he said, and picked up a huge hay-fork and went forward softly.

"You load your hay at a very bad time and in a very bad light," said the man at the door, peering in. "Have you no electric light here?"

Then suddenly he turned on an electric torch and as he did so Pestovitch sprang forward. "Get out of my barn!" he cried, and drove the fork full at the intruder's chest. He had a vague idea that so he might stab the man to silence. But the man shouted loudly as the prongs pierced him and drove him backward, and instantly there was a sound of feet running across the yard.

"Bombs," cried the man upon the ground, struggling with the prongs in his hand, and as Pestovitch staggered forward into view with the force of his own thrust, he was shot through the body by one of the two newcomers.

The man on the ground was badly hurt but plucky. "Bombs," he repeated and struggled up into a kneeling position and held his electric torch full upon the face of the king. "Shoot them," he cried, coughing and spitting blood, so that the halo of light round the king's head danced about.

For a moment in that shivering circle of light the two men saw the king kneeling up in the cart and Peter on the barn floor beside him. The old fox looked at them sideways—snared, a white-faced evil thing. And then as with a faltering suicidal heroism he leaned forward over the bomb before him they fired together and shot him through the head.

The upper part of his face seemed to vanish.

"Shoot them," cried the man who had been stabbed. "Shoot them all!"

And then his light went out and he rolled over with a groan at the feet of his comrades.

But each carried a light of his own, and in another moment everything in the barn was visible again. They shot Peter even as he held up his hands in sign of surrender.

Kurt and Abel at the head of the ladder hesitated for a moment, and then plunged backward into the pit. "If we don't kill them," said one of the sharpshooters, "they'll blow us to rags. They've gone down that hatchway. Come! . . .

"Here they are. Hands up! I say. Hold your light while I shoot. . . ."

§ 8

It was still quite dark when his valet and Firmin came together and told the ex-king Egbert that the business was settled.

He started up into a sitting position on the side of his bed.

"Did he go out?" asked the ex-king.

"He is dead," said Firmin. "He was shot."

The ex-king reflected. "That's about the best thing that could have happened," he said. "Where are the bombs? In that farmhouse on the opposite hillside! Why! the place is in sight! Let us go. I'll dress. Is there any one in the place, Firmin, to get us a cup of coffee?"

Through the hungry twilight of the dawn the ex-king's automobile carried him to the farmhouse where the last rebel king was lying among his bombs. The rim of the sky flashed, the east grew bright, and the sun was just rising over the hills when King Egbert reached the farmyard. There he found the hay lorries drawn out from the barn with the dreadful bombs still packed upon them. A couple of score of aviators held the yard, and outside a few peasants stood in a little group and stared, ignorant as yet of what had happened. Against the stone wall of the farmyard five bodies were lying neatly side by side, and Pestovitch had an expression of surprise on his face and the king was chiefly identifiable by his long white hands and his blond moustache. The wounded aeronaut had been carried down to the inn. And after the ex-king had given directions in what manner the bombs were to be taken to the new special laboratories above Zürich, where they could be unpacked in an atmosphere of chlorine, he turned to these five still shapes.

Their five pairs of feet stuck out with a curious stiff unanimity. . . .

"What else was there to do?" he said in answer to some internal protest.

"I wonder, Firmin, if there are any more of them?"

"Bombs, sir?" asked Firmin.

"No, such kings. . . .

"The pitiful folly of it!" said the ex-king, following his thoughts. "Firmin, as an ex-professor on International Politics, I think it falls to you to bury them. There? . . . No, don't put them near the well. People will have to drink from that well. Bury them over there some way off in the field."

CHAPTER FOUR

THE NEW PHASE

§ 1

THE task that lay before the Assembly of Brissago, viewed as we may view it now from the clarifying standpoint of things accomplished, was in its broad issues a simple one. Essentially it was to place social organisation upon the new footing that the swift accelerated advance of human knowledge had rendered necessary. The council was gathered together with the haste of a salvage expedition, and it was confronted with wreckage; but the wreckage was irreparable wreckage, and the only possibilities of the case were either the relapse of mankind to the agricultural barbarism from which it had emerged so painfully or the acceptance of achieved science as the basis of a new social order. The old tendencies of human nature, suspicion, jealousy, particularism and belligerency, were incompatible with the monstrous destructive power of the new appliances the inhuman logic of science had produced. The equilibrium could be restored only by civilisation destroying itself down to a level at which modern apparatus could no longer be produced, or by human nature adapting itself in its institutions to the new conditions. It was for the later alternative that the assembly existed.

Sooner or later this choice would have confronted mankind. The sudden development of atomic science did but precipitate and render rapid and dramatic a clash between the new and the customary that had been gathering since ever the first flint was chipped or the first fire built together. From the day when man contrived himself a tool and suffered another male to draw near him, he ceased to be altogether a thing of instinct and untroubled convictions. From that day forth a widening breach can be traced between his egotistical passions and the social need. Slowly he adapted himself to the life of the homestead, and his passionate impulses widened out to the demands of the clan and the tribe. But widen though his impulses might, the latent hunter and wanderer and wonderer in his imagination outstripped their development. He was never quite subdued to the soil nor quite tamed to the home. Everywhere it needed teaching and the priest to keep him within the bounds of the plough-life and the beast-tending. Slowly a vast system of traditional imperatives superposed itself upon his instincts, imperatives that were admirably fitted to make him that cultivator, that cattle-minder, who was for twice ten thousand years the normal man.

And, unpremeditated, undesired, out of the accumulations

of his tilling came civilisation. Civilisation was the agricultural surplus. It appeared as trade and tracks and roads, it pushed boats out upon the rivers and presently invaded the seas, and within its primitive courts, within temples grown rich and leisurely and amidst the gathering medley of the seaport towns rose speculation and philosophy and science and the beginning of the new order that has at last established itself as human life. Slowly at first as we traced it and then with an accumulating velocity the new powers were fabricated. Man as a whole did not seek them nor desire them ; they were thrust into his hand. For a time man took up and used these new things and the new powers inadvertently as they came to him, recking nothing of the consequences. For endless generations change led him very gently. But when he had been led far enough change quickened the pace. It was with a series of shocks that he realised at last that he was living the old life less and less and a new life more and more.

Already before the release of atomic energy the tensions between the old way of living and the new were intense. They were far intenser than they had been even at the collapse of the Roman imperial system. On the one hand was the ancient life of the family and the small community and the petty industry, on the other was a new life on a larger scale with remoter horizons and a strange sense of purpose. Already it was growing clear that men must live on one side or the other. One could not have little tradespeople and syndicated businesses in the same market, sleeping carters and motor trolleys on the same road, bows and arrows and aeroplane sharpshooters in the same army, or illiterate peasant industries and power-driven factories in the same world. And still less it was possible that one could have the ideas and ambitions and greed and jealousy of peasants equipped with the vast appliances of the new age. If there had been no atomic bombs to bring together most of the directing intelligence of the world to that hasty conference at Brissago, there would still have been, extended over great areas and a considerable space of time perhaps, a less formal conference of responsible and understanding people upon the perplexities of this world-wide opposition. If the work of Holsten had been spread over centuries and imparted to the world by imperceptible degrees, it would nevertheless have made it necessary for men to take counsel upon and set a plan for the future. Indeed already there had been accumulating for a hundred years before the crisis a literature of foresight ; there was a whole mass of " Modern State " scheming available for the conference to go upon. These bombs did but accentuate and dramatise an already developing problem.

§ 2

This assembly was no leap of exceptional minds and super-intelligences into the control of affairs. It was teachable, its members trailed ideas with them to the gathering, but these were the consequences of the "moral shock" the bombs had given humanity and there is no reason for supposing its individual personalities were greatly above the average. It would be possible to cite a thousand instances of error and inefficiency in its proceedings due to the forgetfulness, irritability or fatigue of its members. It experimented considerably and blundered often. Excepting Holsten, whose gift was highly specialised, it is questionable whether there was a single man of the first order of human quality in the gathering. But it had a modest fear of itself, and a consequent directness that gave it a general distinction. There was of course a noble simplicity about Leblanc, but even of him it may be asked whether he was not rather good and honest-minded than in the fuller sense great.

The ex-king had wisdom and a certain romantic dash, he was a man among thousands even if he was not a man among millions, but his memoirs and indeed his decision to write memoirs give the quality of himself and his associates. The book makes admirable but astonishing reading. Therein he takes the great work the council was doing for granted as a little child takes God. It is as if he had no sense of it at all. He tells amusing trivialities about his cousin Wilhelm and his secretary Firmin, he pokes fun at the American president, who was indeed rather a little accident of the political machine than a representative American, and he gives a long description of how he was lost for three days in the mountains in the company of the only Japanese member, a loss that seems to have caused no serious interruption of the work of the council. . . .

The Brissago conference has been written about time after time as though it were a gathering of the very flower of humanity. Perched up there by the freak or wisdom of Leblanc, it had a certain Olympian quality, and the natural tendency of the human mind to elaborate such a resemblance would have us give its members the likenesses of gods. It would be equally reasonable to compare it to one of those enforced meetings upon the mountain-tops that must have occurred in the opening phases of the Deluge. The strength of the council lay not in itself but in the circumstances that had quickened its intelligence, dispelled its vanities, and emancipated it from traditional ambitions and antagonisms. It was stripped of the accumulations of centuries, a naked government with all that freedom of action that nakedness affords. And its problems were set before it with a plainness that was out of all comparison with the complicated and perplexing intimations of the former time.

§ 3

The world on which the council looked did indeed present a task quite sufficiently immense and altogether too urgent for any wanton indulgence in internal dissension. It may be interesting to sketch in a few phrases the condition of mankind at the close of the period of warring states, in the year of crisis that followed the release of atomic power. It was a world extraordinarily limited when one measures it by later standards, and it was now in a state of the direst confusion and distress.

It must be remembered that at this time men had still to spread into enormous areas of the land surface of the globe. There were vast mountain wildernesses, forest wildernesses, sandy deserts and frozen lands. Men still clung closely to water and arable soil in temperate or subtropical climates, they lived abundantly only in river-valleys, and all their great cities had grown upon large navigable rivers or close to ports upon the sea. Over great areas even of this suitable land flies and mosquitoes, armed with infection, had so far defeated human invasion, and under their protection the virgin forests remained untouched. Indeed the whole world even in its most crowded districts was filthy with flies and swarming with needless insect life to an extent which is now almost incredible. A population map of the world in 1950 would have followed seashore and river course so closely in its darker shading as to give an impression that *homo sapiens* was an amphibious animal. His roads and railways lay also along the lower contours, only here and there to pierce some mountain barrier or reach some holiday resort did they clamber above 3000 feet. And across the ocean his traffic passed in definite lines; there were hundreds of thousands of square miles of ocean no ship ever traversed except by mischance.

Into the mysteries of the solid globe under his feet he had not yet pierced for five miles, and it was still not forty years since with a tragic pertinacity he had clambered to the poles of the earth. The limitless mineral wealth of the Arctic and Antarctic circles was still buried beneath vast accumulations of immemorial ice, and the secret riches of the inner zones of the crust were untapped and indeed unsuspected. The higher mountain regions were known only to a sprinkling of guide-led climbers and the frequenters of a few gaunt hotels, and the vast rainless belts of land that lay across the continental masses, from Gobi to Sahara and along the backbone of America, with their perfect air, their daily baths of blazing sunshine, their nights of cool serenity and glowing stars, and their reservoirs of deep-lying water, were as yet only desolations of fear and death to the common imagination.

And now under the shock of the atomic bombs, the great

masses of population, which had gathered into the enormous dingy town centres of that period were dispossessed and scattered disastrously over the surrounding rural areas. It was as if some brutal force, grown impatient at last at man's blindness, had with the deliberate intention of a rearrangement of population upon more wholesome lines, shaken the world. The great industrial regions and the large cities that had escaped the bombs were, because of their complete economic collapse, in almost as tragic plight as those that blazed, and the countryside was disordered by a multitude of wandering and lawless strangers. In some parts of the world famine raged, and in many regions there was plague. . . . The plains of north India, which had become more and more dependent for the general welfare on the railways and that great system of irrigation canals which the malignant section of the patriots had destroyed, were in a state of peculiar distress, whole villages lay dead together, no man heeding, and the very tigers and panthers that preyed upon the emaciated survivors crawled back infected into the jungle to perish. Large areas of China were a prey to brigand bands. . . .

It is a remarkable thing that no complete contemporary account of the explosion of the atomic bombs survives. There are of course innumerable allusions and partial records, and it is from these that subsequent ages must piece together the image of these devastations.

The phenomena, it must be remembered, changed greatly from day to day and even from hour to hour as the exploding bomb shifted its position, threw off fragments or came into contact with water or a fresh texture of soil. Barnet, who came within forty miles of Paris early in October, is concerned chiefly with his account of the social confusion of the country-side and the problems of his command, but he speaks of heaped cloud masses of steam "all along the sky to the south-west," and of a red glare beneath these at night. Parts of Paris were still burning, and numbers of people were camped in the fields even at this distance watching over treasured heaps of salvaged loot. He speaks too of the distant rumbling of the explosion—"like trains going over iron bridges."

Other descriptions agree with this; they all speak of the "continuous reverberations," or of the "thudding and hammering," or some such phrase; and they all testify to a huge pall of steam, from which rain would fall suddenly in torrents and amidst which lightning played. Drawing nearer to Paris an observer would have found the salvage camps increasing in number and blocking up the villages, and large numbers of people, often starving and ailing, camping under improvised tents because there was no place for them to go. The sky became more and more densely overcast until at last it blotted out the light of day and left nothing but a dull red glare "extraordinarily depressing to the spirit." In this dull

glare great numbers of people were still living, clinging to their houses and in many cases subsisting in a state of partial famine upon the produce in their gardens and the stores in the shops of the provision dealers.

Coming in still closer the investigator would have reached the police cordon, which was trying to check the desperate enterprise of those who would return to their homes or rescue their more valuable possessions within the "zone of imminent danger."

That zone was rather arbitrarily defined. If our spectator could have got permission to enter it, he would have entered also a zone of uproar, a zone of perpetual thunderings, lit by a strange purplish-red light, and quivering and swaying with the incessant explosion of the radioactive substance. Whole blocks of buildings were alight and burning fiercely, the trembling ragged flames looking pale and ghastly and attenuated in comparison with the full-bodied crimson glare beyond. The shells of other edifices already burned rose pierced by rows of window-sockets against the red-lit mist.

Every step farther would have been as dangerous as a descent within the crater of an active volcano. These spinning, boiling bomb centres would shift or break unexpectedly into new regions, great fragments of earth or drain or masonry suddenly caught by a jet of disruptive force might come flying by the explorer's head, or the ground yawn a fiery grave beneath his feet. Few who adventured into these areas of destruction and survived attempted any repetition of their experiences. There are stories of puffs of luminous, radioactive vapour drifting sometimes scores of miles from the bomb centre and killing and scorching all they overtook. And the first conflagrations from the Paris centre spread westward half-way to the sea.

Moreover the air in this infernal inner circle of red-lit ruins had a peculiar dryness and a blistering quality, so that it set up a soreness of the skin and lungs that was very difficult to heal.

Such was the last state of Paris, and such on a larger scale was the condition of affairs in Chicago, and the same fate had overtaken Berlin, Moscow, Tokio, the eastern half of London, Toulon, Kiel and two hundred and eighteen other centres of population or armament. Each was a flaming centre of radiant destruction that only time could quench, that indeed in many instances time has still to quench. To this day, though indeed with a constantly diminishing uproar and vigour, these explosions continue. In the map of nearly every country of the world three or four or more red circles, a score of miles in diameter, mark the position of the dying atomic bombs and the death areas that men have been forced to abandon around them. Within these areas perished museums, cathedrals, palaces, libraries, galleries of master-

pieces and a vast accumulation of human achievement, whose charred remains lie buried, a legacy of curious material that only future generations may hope to examine. . . .

§ 4

The state of mind of the dispossessed urban population which swarmed and perished so abundantly over the countryside during the dark days of the autumnal months that followed the Last War was one of blank despair. Barnet gives sketch after sketch of groups of these people, camped among the vineyards of Champagne, as he saw them during his period of service with the army of pacification.

There was, for example, that "man-milliner" who came out from a field beside the road that rises up eastward out of Epernay, and asked how things were going in Paris. He was, says Barnet, a round-faced man dressed very neatly in black—so neatly that it was amazing to discover he was living close at hand in a tent made of carpets—and he had "an urbane but insistent manner," a carefully trimmed moustache and beard, expressive eyebrows and hair very neatly brushed.

"No one goes into Paris," said Barnet.

"But, Monsieur, that is very unenterprising," the man by the wayside submitted.

"The danger is too great. The radiations eat into people's skins."

The eyebrows protested. "But is nothing to be done?"

"Nothing can be done."

"But, Monsieur, it is extraordinarily inconvenient, this living in exile and waiting. My wife and my little boy suffer extremely. There is a lack of amenity. And the season advances. I say nothing of the expense and difficulty in obtaining provisions. . . . When does Monsieur think that something will be done to render Paris—possible?"

Barnet considered his interlocutor.

"I'm told," said Barnet, "that Paris is not likely to be possible again for several generations."

"Oh! but this is preposterous! Consider, Monsieur! What are people like ourselves to do in the meanwhile? I am a costumier. All my connections and interests, above all my style, demand Paris. . . ."

Barnet considered the sky, from which a light rain was beginning to fall, the wide fields about them from which the harvest had been taken, the trimmed poplars by the wayside.

"Naturally," he agreed, "you want to go to Paris. But Paris is over."

"Over!"

"Finished."

"But then, Monsieur—what is to become—of *me*?"

Barnet turned his face westward whither the white road led.

"Where else, for example, may I hope to find—opportunity?"

Barnet made no reply.

"Perhaps on the Riviera. Or at some such place as Homburg. Or some plage perhaps."

"All that," said Barnet, accepting for the first time facts that had lain evident in his mind for weeks, "all that must be over too."

There was a pause. Then the voice beside him broke out. "But, Monsieur, it is impossible! It leaves—nothing."

"No. Not very much."

"One cannot suddenly begin to grow potatoes!"

"It would be good if Monsieur could bring himself——"

"To the life of a peasant! And my wife——. You do not know the distinguished delicacy of my wife, a refined helplessness, a peculiar dependent charm. Like some slender tropical creeper—with great white flowers. . . . But all this is foolish talk. It is impossible that Paris, which has survived so many misfortunes, should not presently revive."

"I do not think it will ever revive. Paris is finished. London too, I am told—Berlin. All the great capitals were struck. . . ."

"But——! Monsieur must permit me to differ."

"It is so."

"It is impossible. Civilisations do not end in this manner. Mankind will insist."

"On Paris?"

"On Paris."

"Monsieur, you might as well hope to go down the Maelstrom and resume business there."

"I am content, Monsieur, with my own faith."

"The winter comes on. Would not Monsieur be wiser to seek a house?"

"Farther from Paris? No, Monsieur. But it is not possible, Monsieur, what you say, and you are under a tremendous mistake. . . . Indeed you are in error. . . . I asked merely for information. . . ."

"When last I saw him," said Barnet, "he was standing under the sign-post at the crest of the hill, gazing wistfully yet it seemed to me a little doubtfully now towards Paris, and altogether heedless of a drizzling rain that was wetting him through and through. . . ."

§ 5

This effect of chill dismay, of a doom as yet imperfectly apprehended, deepens as Barnet's record passes on to tell of the approach of winter. It was too much for the great mass of those unwilling and incompetent nomads to realise that an age had ended, that the old help and guidance existed no

longer, that times would not mend again however patiently they held out. They were still in many cases looking to Paris when the first snowflakes of that pitiless January came swirling about them. The story grows grimmer. . . .

If it is less monstrously tragic after Barnet's return to England it is, if anything, harder. England was a spectacle of fear-embittered householders, hiding food, crushing out robbery, driving the starving wanderers from every faltering place upon the roads lest they should die inconveniently and reproachfully on the door-steps of those who had failed to urge them onward. . . .

The remnants of the British troops left France finally in March, after urgent representations from the provisional government at Orleans that they could be supported no longer. They seem to have been a fairly well-behaved but highly parasitic force throughout, though Barnet is clearly of opinion that they did much to suppress sporadic brigandage and maintain social order. He came home to a famine-stricken country, and his picture of the England of that spring is one of miserable patience and desperate expedients. The country was suffering much more than France because of the cessation of the overseas supplies on which it had hitherto relied. His troops were given bread, dried fish and boiled nettles at Dover, and marched inland to Ashford and paid off. On the way thither they saw four men hanging from the telegraph-posts by the roadside who had been hung for stealing swedes. The labour refuges of Kent, he discovered, were feeding their crowds of casual wanderers on bread into which clay and sawdust had been mixed. In Surrey there was a shortage of even such fare as that. He himself struck across country to Winchester, fearing to approach the bomb-poisoned district round London, and at Winchester he had the luck to be taken on as one of the wireless assistants at the central station and given regular rations. The station stood in a commanding position on the chalk hill that overlooks the town from the east. . . .

Then he must have assisted in the transmission of the endless cipher messages that preceded the gathering at Brissago, and there it was that the Brissago proclamation of the end of the war and the establishment of a world government came under his hands.

He was feeling ill and apathetic that day, and he did not realise what it was he was transcribing. He did it mechanically, as a part of his tedious duty.

Afterwards there came a rush of messages arising out of the declaration that strained him very much, and in the evening when he was relieved, he ate his scanty supper and then went out upon the little balcony before the station, to smoke and rest his brains after this sudden and as yet inexplicable press of duty. It was a very beautiful still evening. He fell talking

to a fellow-operator, and for the first time, he declares, "I began to understand what it was all about. I began to see just what enormous issues had been under my hands for the past four hours. But I became incredulous after my first stimulation. 'This is some sort of Bunkum,' I said very sagely.

"My colleague was more hopeful. 'It means an end to bomb-throwing and destruction,' he said. 'It means that presently corn will come from America.'

"'Who is going to send corn when there is no more value in money?' I asked.

"Suddenly we were startled by a clashing from the town below. The cathedral bells, which had been silent ever since I had come into the district, were beginning, with a sort of rheumatic difficulty, to ring. Presently they warmed a little to the work, and we realised what was going on. They were ringing a peal. We listened with an unbelieving astonishment and looking into each other's yellow faces.

"'They mean it,' said my colleague.

"'But what can they do now?' I asked. 'Everything is broken down. . . .'"

And on that sentence, with an unexpected artistry, Barnet abruptly ends his story.

§ 6

From the first the new government handled affairs with a certain greatness of spirit. Indeed it was inevitable that they should act greatly. From the first they had to see the round globe as one problem; it was impossible any longer to deal with it piece by piece. They had to secure it universally from any fresh outbreak of atomic destruction, and they had to ensure a permanent and universal pacification. On this capacity to grasp and wield the whole round globe their existence depended. There was no scope for any further performance.

So soon as the seizure of the existing supplies of atomic ammunition and the apparatus for synthesising Carolinum was assured, the disbanding or social utilisation of the various masses of troops still under arms had to be arranged, the salvation of the year's harvests, and the feeding, housing, and employment of the drifting millions of homeless people. In Canada, in South America, and Asiatic Russia there were vast accumulations of provision that was immovable only because of the breakdown of the monetary and credit systems. These had to be brought into the famine districts very speedily if entire depopulation was to be avoided; and their transportation, and the revival of communications generally, absorbed a certain proportion of the soldiery and more able unemployed. The task of housing assumed gigantic dimen-

sions, and from building camps the housing committee of the council speedily passed to constructions of a more permanent type. They found far less friction than might have been expected in turning the loose population on their hands to these things. People were extraordinarily tamed by that year of suffering and death ; they were disillusioned of their traditions, bereft of once obstinate prejudices ; they felt foreign in a strange world and ready to follow any confident leadership. The orders of the new government came with the best of all credentials, rations. The people everywhere were as easy to control, one of the old labour experts who had survived until the new time witnesses, "as gangs of emigrant workers in a new land."

And now it was that the social possibilities of the atomic energy began to appear. The new machinery that had come into existence before the last wars increased and multiplied, and the council found itself not only with millions of hands at its disposal but with power and apparatus that made its first conceptions of the work it had to do seem pitifully timid. The camps that were planned in iron and deal were built in stone and brass ; the roads that were to have been mere iron tracks became spacious ways that insisted upon architecture ; the cultivations of foodstuffs that were to have supplied emergency rations were presently, with synthesisers, fertilisers, actinic light and scientific direction, in excess of every human need.

The government had begun with the idea of temporarily reconstituting the social and economic system that had prevailed before the first coming of the atomic engine, because it was to this system that the ideas and habits of the great mass of the world's dispossessed population was adapted. Subsequent rearrangement it had hoped to leave to its successors—whoever they might be. But this, it became more and more manifest, was absolutely impossible. As well might the council have proposed a revival of slavery. The capitalistic system had already been smashed beyond repair by the onset of limitless gold and energy ; it fell to pieces at the first endeavour to stand it up again. Already before the war half of the industrial class had been out of work, the attempt to put them back into wages employment on the old lines was futile from the outset—the absolute shattering of the currency system alone would have been sufficient to prevent that, and it was necessary therefore to take over the housing, feeding, and clothing of this world-wide multitude without exacting any return in labour whatever. In a little while the mere absence of occupation for so great a multitude of people everywhere became an evident social danger, and the government was obliged to resort to such devices as simple decorative work in wood and stone, the manufacture of hand-woven textiles, fruit-growing, flower-growing, and landscape-

gardening on a grand scale to keep the less adaptable out of mischief, and of paying wages to the younger adults for attendance at schools that would equip them to use the new atomic machinery. . . . So quite insensibly, the council drifted into a complete reorganisation of urban and industrial life, and indeed of the entire social system.

Ideas that are unhampered by political intrigue or financial considerations have a sweeping way with them, and before a year was out the records of the council show clearly that it was rising to its enormous opportunity, and partly through its own direct control and partly through a series of specific committees, it was planning a new common social order for the entire population of the earth. "There can be no real social stability or any general human happiness while large areas of the world and large classes of people are in a phase of civilisation different from the prevailing mass. It is impossible now to have great blocks of population misunderstanding the generally accepted social purpose or at an economic disadvantage to the rest." So the council expressed its conception of the problem it had to solve. The peasant, the field-worker, and all barbaric cultivators were at an "economic disadvantage" to the more mobile and educated classes, and the logic of the situation compelled the council to take up systematically the supersession of this stratum by a more efficient organisation of production. It developed a scheme for the progressive establishment throughout the world of the "modern system" in agriculture, a system that should give the full advantages of a civilised life to every agricultural worker, and this replacement has been going on right up to the present day. The central idea of the modern system is the substitution of cultivating guilds for the individual cultivator and for cottage and village life altogether. These guilds are associations of men and women who take over areas of arable or pasture land, and make themselves responsible for a certain average produce. They are bodies small enough as a rule to be run on a strictly democratic basis and large enough to supply all the labour, except for a certain assistance from townspeople during the harvest, needed upon the land farmed. They have watchers' bungalows or châlets on the ground cultivated, but the ease and the costlessness of modern locomotion enables them to maintain a group of residences in the nearest town with a common dining-room and club-house, and usually also a guild-house in the national or provincial capital. Already this system has abolished a distinctively "rustic" population throughout vast areas of the old world where it has prevailed immemorially. That shy, unstimulated life of the lonely hovel, the narrow scandals and petty spites and persecutions of the small village, that hoarding, half-inanimate existence away from books, thought or social participation and in constant contact with cattle,

pigs, poultry and their excrement is passing away out of human experience. In a little while it will be gone altogether. In the nineteenth century it had already ceased to be a necessary human state, and only the absence of any collective intelligence and an imagined need for tough and unintelligent soldiers and for a prolific class at a low level prevented its systematic replacement at that time. . . .

And while this settlement of the country was in progress, the urban camps of the first phase of the council's activities were rapidly developing, partly through the inherent forces of the situation and partly through the council's direction, into a modern type of town. . . .

§ 7

It is characteristic of the manner in which large enterprises forced themselves upon the Brissago council that it was not until the end of the first year of their administration and then only with extreme reluctance that they would take up the manifest need for a *lingua franca* for the world. They seem to have given little attention to the various theoretical universal languages which were proposed to them. They wished to give as little trouble to hasty and simple people as possible, and the world-wide distribution of English gave them a bias for it from the beginning. The extreme simplicity of its grammar was also in its favour.

It was not without some sacrifices that the English-speaking peoples were permitted the satisfaction of hearing their speech used universally. The language was shorn of a number of grammatical peculiarities, the distinctive forms for the subjunctive mood for example and most of its irregular plurals were abolished; its spelling was systematised and adapted to the vowel sounds in use upon the continent of Europe, and a process of incorporating foreign nouns and verbs commenced that speedily reached enormous proportions. Within ten years from the establishment of the World Republic the New English Dictionary had swelled to include a vocabulary of 250,000 words, and a man of 1900 would have found considerable difficulty in reading an ordinary newspaper. On the other hand the men of the new time could still appreciate the older English literature. . . . Certain minor acts of uniformity accompanied this larger one. The idea of a common understanding and a general simplification of intercourse once it was accepted led very naturally to the universal establishment of the metric system of weights and measures, and to the disappearance of the various makeshift calendars that had hitherto confused chronology. The year was divided into thirteen months of four weeks each, and New Year's Day and Leap Year's Day were made holidays and did not count at all in the ordinary week. So the weeks and the

months were brought into correspondence. And moreover, as the king put it to Firmin, it was decided to "nail down Easter." . . . In these matters as in so many matters the new civilisation came as a simplification of ancient complications; the history of the calendar throughout the world is a history of inadequate adjustments, of attempts to fix seed-time and midwinter that go back into the very beginning of human society; and this final rectification had a symbolic value quite beyond its practical convenience. But the council would have no rash nor harsh innovations, no strange names for the months and no alteration in the numbering of the years.

The world had already been put upon one universal monetary basis. For some months after the accession of the council the world's affairs had been carried on without any sound currency at all. Over great regions money was still in use, but with the most extravagant variations in price and the most disconcerting fluctuations of public confidence. The ancient rarity of gold upon which the entire system rested was gone. Gold was now a waste product in the release of atomic energy, and it was plain that no metal could be the basis of the monetary system again. Henceforth all coins must be token coins. Yet the whole world was accustomed to metallic money, and a vast proportion of existing human relationships had grown up upon a cash basis and were almost inconceivable without that convenient liquidating factor. It seemed absolutely necessary to the life of the social organisation to have some sort of currency, and the council had therefore to discover some real value upon which to rest it. Various such apparently stable values as land and hours of work were considered. Ultimately the government, which was now in possession of most of the supplies of energy-releasing material, fixed a certain number of units of energy as the value of a gold sovereign, declared a sovereign to be worth exactly twenty marks, twenty-five francs, five dollars and so forth with the other current units of the world, and undertook, under various qualifications and conditions, to deliver energy upon demand as payment for every sovereign presented. On the whole this worked satisfactorily. They saved the face of the pound sterling. Coin was rehabilitated, and after a phase of price fluctuations began to settle down to definite equivalents and uses again, with names and every-day values familiar to the common run of people. . . .

§ 8

As the Brissago council came to realise that what it had supposed to be temporary camps of refugees were rapidly developing into great towns of a new type and that it was remoulding the world in spite of itself, it decided to place

this work of redistributing the non-agricultural population in the hands of a compacter and better qualified special committee. That committee is now, far more than the council or any other of its delegated committees, the active government of the world. Developed from an almost invisible germ of "town-planning" that came obscurely into existence in Europe or America (the question is still in dispute) somewhere in the closing decades of the nineteenth century, its work, the continual active planning and replanning of the world as a place of human habitation, is now so to speak the collective material activity of the race. The spontaneous, disorderly spreadings and recessions of populations, as aimless and mechanical as the trickling of spilled water, which was the substance of history for endless years, giving rise here to congestions, here to chronic devastating wars, and everywhere to a discomfort and disorderliness that was at its best only picturesque, is at an end. Men spread now, with the whole power of the race to aid them, into every available region of the earth. Their cities are no longer tethered to running water and the proximity of cultivation, their plans are no longer affected by strategic considerations or thoughts of social insecurity. The aeroplane and the nearly costless mobile car have abolished trade routes; a common language and a universal law have abolished a thousand restraining inconveniences, and so an astonishing dispersal of habitations has begun. One may live anywhere. And so it is that our cities now are true social gatherings, each with a character of its own and distinctive interests of its own, and most of them with a common occupation. They lie out in the former deserts, these long wasted sunbaths of the race, they tower amidst eternal snows, they hide in remote islands and back on broad lagoons. For a time the whole tendency of mankind was to desert the river-valleys in which the race had been cradled for half a million years, but now that the War against Flies has been waged so successfully that this pestilential branch of life is nearly extinct, they are returning thither with a renewed appetite for gardens laced by watercourses, for pleasant living amidst islands and houseboats and bridges, and for nocturnal lanterns reflected by the sea.

Man who is ceasing to be an agricultural animal becomes more and more a builder, a traveller and a maker. How much he ceases to be a cultivator of the soil the returns of the Redistribution Committee showed. Every year the work of our scientific laboratories increases the productivity and simplifies the labour of those who work upon the soil, and the food now of the whole world is produced by less than one per cent. of its population, a percentage which still tends to decrease. Far fewer people are needed upon the land than training and proclivity dispose towards it, and as a consequence of this excess of human attention, the garden side of life,

the creation of groves and lawns and vast regions of beautiful flowers had expanded enormously and continues to expand. For as agricultural method intensifies and the quota is raised one farm association after another, availing itself of the 1975 regulations, elects to produce a public garden and pleasaunce in the place of its former fields, and the area of freedom and beauty is increased. And the chemists' triumphs of synthesis which could now give us an entirely artificial food remain largely in abeyance because it is so much more pleasant and interesting to eat natural produce and to grow such things upon the soil. Each year adds to the variety of our fruits and the delightfulness of our flowers.

§ 9

The early years of the World Republic witnessed a certain recrudescence of political adventure. There was, it is rather curious to note, no revival of separatism after the face of King Ferdinand Charles had vanished from the sight of men, but in a number of countries, as the first urgent physical needs were met, there appeared a variety of personalities having this in common, that they sought to revive political trouble and clamber by its aid to positions of importance and satisfaction. In no case did they speak in the name of kings, and it is clear that monarchy must have been far gone in obsolescence before the twentieth century began, but they made appeals to the large survivals of nationalist and racial feeling that were everywhere to be found, they alleged with considerable justice that the council was overriding racial and national customs and disregarding religious rules. The great plain of India was particularly prolific in such agitators. The revival of newspapers, which had largely ceased during the terrible year because of the dislocation of the coinage, gave a vehicle and a method of organisation to these complaints. At first the council disregarded this developing opposition, and then it recognised it with an entirely devastating frankness.

Never of course had there been so provisional a government. It was of an extravagant illegality. It was indeed hardly more than a club, a club of about a hundred persons. At the outset there were ninety-three, and these were increased afterwards by the issue of invitations which more than balanced its deaths, to as many at one time as one hundred and nineteen. Always its constitution has been miscellaneous. At no time were these invitations issued with an admission that they recognised a right. The old institution of monarchy had come out unexpectedly well in the light of the new régime. Nine of the original members of the first government were crowned heads who had resigned their separate sovereignty, and at no time afterwards did the number of its royal members sink below six. In their case there was perhaps a kind of

attenuated claim to rule, but except for them and the still more infinitesimal pretensions of one or two ex-presidents of republics, no member of the council had even the shade of a right to his participation in its power. It was natural, therefore, that its opponents should find a common ground in a clamour for representative government, and build high hopes upon a return to parliamentary institutions.

The council decided to give them everything they wanted, but in a form that suited ill with their aspirations. It became at one stroke a representative body. It became indeed magnificently representative. It became so representative that the politicians were drowned in a deluge of votes. Every adult of either sex from pole to pole was given a vote, and the world was divided into ten constituencies, which voted on the same day by means of a simple modification of the world post. Membership of the government it was decided must be for life, save in the exceptional case of a recall; but the elections, which were held quinquennially, were arranged to add fifty members on each occasion. The method of proportional representation with one transferable vote was adopted, and the voter might also write upon his voting paper in a specially marked space the name of any of his representatives that he wished to recall. A ruler was recallable by as many votes as the quota by which he had been elected, and the original members by as many votes in any constituency as the returning quotas in the first election.

Upon these conditions the council submitted itself very cheerfully to the suffrages of the world. None of its members were recalled, and its fifty new associates, which included twenty-seven which it had seen fit to recommend, were of an altogether too miscellaneous quality to disturb the broad trend of its policy. Its freedom from rules or formalities prevented any obstructive proceedings, and when one of the two newly arrived Home Rule members for India sought for information how to bring in a bill, they learned simply that bills were not brought in. They asked for the speaker, and were privileged to hear much ripe wisdom from the ex-king Egbert, who was now consciously among the seniors of the gathering. Thereafter they were baffled men. . . .

But already by that time the work of the council was drawing to an end. It was concerned not so much for the continuation of its construction as for the preservation of its accomplished work from the dramatic instincts of the politician.

The life of the race becomes indeed more and more independent of the formal government. The council in its opening phase was heroic in spirit; a dragon-slaying body, it slashed out of existence a vast knotted tangle of obsolete ideas and clumsy and jealous proprietorships; it secured by a noble system of institutional precautions, freedom of inquiry, freedom of criticism, free communications, a common basis of

education and understanding and freedom from economic oppression. With that its creative task was accomplished. It became more and more an established security and less and less an active intervention. There is nothing in our time to correspond with the continual petty making and entangling of laws in an atmosphere of contention that is perhaps the most perplexing aspect of constitutional history in the nineteenth century. In that age they seem to have been perpetually making laws when we should alter regulations. The work of change which we delegate to these scientific committees of specific general direction having the special knowledge needed, and which are themselves dominated by the broad intellectual process of the community, was in those days inextricably mixed up with legislation. They fought over the details ; we should as soon think of fighting over the arrangement of the parts of a machine. We know nowadays that such things go on best within laws, as life goes on between earth and sky. And so it is that government gathers now for a day or so in each year under the sunshine of Brissago when Saint Bruno's lilies are in flower, and does little more than bless the work of its committees. And even these committees are less originative and more expressive of the general thought than they were at first. It becomes difficult to mark out the particular directive personalities of the world. Continually we are less personal. Every good thought contributes now, and every able brain falls within that informal and dispersed kingship which gathers together into one purpose the energies of the race.

§ 10

It is doubtful if we shall ever see again a phase of human existence in which " politics," that is to say a partisan interference with the ruling sanities of the world, will be the dominant interest among serious men. We seem to have entered upon an entirely new phase in history in which contention as distinguished from rivalry has almost abruptly ceased to be the usual occupation, and has become at most a subdued and hidden and discredited thing. Contentious professions cease to be an honourable employment for men. The peace between nations is also a peace between individuals. We live in a world that comes of age. Man the warrior, man the lawyer, and all the bickering aspects of life, pass into obscurity ; the grave dreamers, man the curious learner and man the creative artist, come forward to replace these barbaric aspects of existence by a less ignoble adventure.

There is no natural life of man. He is and always has been a sheath of varied and even incompatible possibilities, a palimpsest of inherited dispositions. It was the habit of many writers in the early twentieth century to speak of com-

petition and the narrow private life of trade and saving and suspicious isolation as though such things were in some exceptional way proper to the human constitution, and as though openness of mind and a preference for achievement over possession were abnormal and rather unsubstantial qualities. How wrong that was the history of the decades immediately following the establishment of the world republic witnesses. Once the world was released from the hardening insecurities of a needless struggle for life that was collectively planless and individually absorbing, it became apparent that there was in the vast mass of people a long smothered passion to make things. The world broke out into making, and at first mainly into æsthetic making. This phase of history, which has been not inaptly termed the "Efflorescence," is still to a large extent with us. The majority of our population consists of artists, and the bulk of activity in the world lies no longer with necessities but with their elaboration, decoration and refinement. There has been an evident change in the quality of this making during recent years. It becomes more purposeful than it was, losing something of its first elegance and prettiness and gaining in intensity; but that is a change rather of hue than of nature. That comes with a deepening philosophy and a sounder education. For the first joyous exercises of fancy we perceive now the deliberation of a more constructive imagination. There is a natural order in these things, and art comes before science as the satisfaction of more elemental needs must come before art, and as play and pleasure come in a human life before the development of a settled purpose. . . .

For thousands of years this gathering impulse to creative work must have struggled in man against the limitations imposed upon him by his social ineptitude. It was a long smouldering fire that flamed out at last in all these things. The evidence of a pathetic, perpetually thwarted urgency to make something is one of the most touching aspects of the relics and records of our immediate ancestors. There exists still in the death area about the London bombs a region of deserted small homes that furnish the most illuminating comment on the old state of affairs. These homes are entirely horrible, uniform, square, squat, hideously proportioned, uncomfortable, dingy and in some respects quite filthy, only people in complete despair of anything better could have lived in them, but to each is attached a ridiculous little rectangle of land called "the garden," containing usually a prop for drying clothes and a loathsome box of offal, the dust-bin, full of egg-shells, cinders and such-like refuse. Now that one may go about this region in comparative security—for the London radiations have dwindled to inconsiderable proportions—it is possible to trace in nearly every one of these gardens some effort to make. Here it is a poor little

plank summer-house, here it is a "fountain" of bricks and oyster-shells, here a "rockery," here a "workshop." And in the houses everywhere there are pitiful little decorations, clumsy models, feeble drawings. These efforts are almost incredibly inept, like the drawings of blindfolded men, they are only one shade less harrowing to a sympathetic observer than the scratchings one finds upon the walls of the old prisons, but there they are, witnessing to the poor buried instincts that struggled up towards the light. That god of joyous expression our poor fathers ignorantly sought, our freedom has declared to us. . . .

In the old days the common ambition of every simple soul was to possess a little property, a patch of land, a house uncontrolled by others, an "independence" as the English used to put it. And what made this desire for freedom and prosperity so strong was very evidently the dream of self-expression, of doing something with it, of playing with it, of making a personal delightfulness, a distinctiveness. Property was never more than a means to an end, nor avarice more than a perversion. Men owned in order to do freely. Now that every one has his own apartments and his own privacy secure, this disposition to own has found its release in a new direction. Men study and save and strive that they may leave behind them a series of panels in some public arcade, a row of carven figures along a terrace, a grove, a pavilion. Or they give themselves to the penetration of some still opaque riddle in phenomena as once men gave themselves to the accumulation of riches. The work that was once the whole substance of social existence—for most men spent all their lives in earning a living—is now no more than was the burden upon one of those old climbers who carried knapsacks of provisions on their backs in order that they might ascend mountains. It matters little to the easy charities of our emancipated time that most people who have made their labour contribution produce neither new beauty nor new wisdom, but are simply busy about those pleasant activities and enjoyments that reassure them that they are alive. They help, it may be, by reception and reverberation, and they hinder nothing. . . .

§ 11

Now all this phase of gigantic change in the contours and appearances of human life which is going on about us, a change as rapid and as wonderful as the swift ripening of adolescence to manhood after the barbaric boyish years, is correlated with moral and mental changes at least as unprecedented. It is not as if old things were going out of life and new things coming in, it is rather that the altered circumstances of men are making an appeal to elements in his nature that have hitherto been suppressed, and checking tendencies that have

hitherto been overstimulated and overdeveloped. He has not so much grown and altered his essential being as turned new aspects to the light. Such turnings round into a new attitude the world has seen on a less extensive scale before. The Highlanders of the seventeenth century, for example, were cruel and bloodthirsty robbers, in the nineteenth their descendants were conspicuously trusty and honourable men. There was not a people in Western Europe in the early twentieth century that seemed capable of hideous massacres, and none that had not been guilty of them within the previous two centuries. The free frank kindly gentle life of the prosperous classes in any European country before the years of the last wars was in a different world of thought and feeling from that of the dingy, suspicious, secretive and uncharitable existence of the respectable poor, or the constant personal violence, the squalor and naïve passions of the lowest stratum. Yet there were no real differences of blood and inherent quality between these worlds ; their differences were all in circumstances, suggestion and habits of mind. And turning to more individual instances the constantly observed difference between one portion of a life and another consequent upon a religious conversion were a standing example of the versatile possibilities of human nature.

The catastrophe of the atomic bombs which shook men out of cities and businesses and economic relations shook them also out of their old established habits of thought, and out of the lightly held beliefs and prejudices that came down to them from the past. To borrow a word from the old-fashioned chemists, men were made nascent ; they were released from old ties ; for good or evil they were ready for new associations. The council carried them forward for good ; perhaps if his bombs had reached their destination King Ferdinand Charles might have carried them back to an endless chain of evils. But his task would have been a harder one than the council's. The moral shock of the atomic bombs had been a profound one, and for a while the cunning side of the human animal was overpowered by its sincere realisation of the vital necessity for reconstruction. The litigious and trading spirits cowered together, scared at their own consequences ; men thought twice before they sought mean advantages in the face of the unusual eagerness to realise new aspirations, and when at last the weeds revived again and "claims" began to sprout, they sprouted upon the stony soil of law-courts reformed, of laws that pointed to the future instead of the past, and under the blazing sunshine of a transforming world. A new literature, a new interpretation of history, were springing into existence, a new teaching was already in the schools, a new faith in the young. The worthy man who forestalled the building of a research city for the English upon the Sussex downs by buying up a series of estates was

dispossessed and laughed out of court when he made his demand for some preposterous compensation ; the owner of the discredited Dass patents makes his last appearance upon the scroll of history as the insolvent proprietor of a paper called *The Cry for Justice*, in which he duns the world for a hundred million pounds. That was the ingenuous Dass's idea of justice, that he ought to be paid about five million pounds annually because he had annexed the selvage of one of Holsten's discoveries. Dass came at last to believe quite firmly in his right, and he died a victim to conspiracy mania in a private hospital at Nice. Both of these men would probably have ended their days enormously wealthy and of course ennobled in the England of the opening twentieth century, and it is just this novelty of their fates that marks the quality of the new age.

The new government early discovered the need of a universal education to fit men to the great conceptions of its universal rule. It made no wrangling attacks on the local, racial and sectarian forms of religious profession that at that time divided the earth into a patchwork of hatreds and distrusts ; it left these organisations to make their peace with God in their own fashion ; but it proclaimed as if it were a mere secular truth that sacrifice was expected from all, that respect had to be shown to all ; it revived schools or set them up afresh all around the world, and everywhere these schools taught the history of war and the consequences and moral of the Last War ; everywhere it was taught not as a sentiment but as a matter of fact that the salvation of the world from waste and contention was the common duty and occupation of all men and women. These things which are now the elementary commonplaces of human intercourse seemed to the councillors of Brissago, when first they dared to proclaim them, marvellously daring discoveries, not untouched by doubt, that flushed the cheek and fired the eye.

The council placed all this educational reconstruction in the hands of a committee of men and women, which did its work during the next few decades with remarkable breadth and effectiveness. This educational committee was and is the correlative upon the mental and spiritual side of the redistribution committee. And prominent upon it, and indeed for a time quite dominating it, was a Russian named Karenin who was singular in being a congenital cripple. His body was bent so that he walked with difficulty, suffered much pain as he grew older, and had at last to undergo two operations. The second killed him. Already malformation, which was to be seen in every crowd during the middle ages so that the crippled beggar was as it were an essential feature of the human spectacle, was becoming a strange thing in the world. It had a curious effect upon Karenin's colleagues ; their feeling towards him was mingled with pity and a sense of inhumanity

that it needed usage rather than reason to overcome. He had a strong face, with little bright brown eyes rather deeply sunken and a large resolute thin-lipped mouth. His skin was very yellow and wrinkled and his hair iron grey. He was at all times an impatient and sometimes an angry man, but this was forgiven him because of the hot wire of suffering that was manifestly thrust through his being. At the end of his life his personal prestige was very great. To him far more than to any contemporary is it due that self-abnegation, self-identification with the world spirit, was made the basis of universal education. That general memorandum to the teachers which is the key-note of the modern educational system was probably entirely his work.

"Whosoever would save his soul shall lose it," he wrote. "That is the device upon the seal of this document and the starting-point of all we have to do. It is a mistake to regard it as anything but a plain statement of fact. It is the basis for your work. You have to teach self-forgetfulness, and everything else that you have to teach is contributory and subordinate to that end. Education is the release of man from self. You have to widen the horizons of your children, encourage and intensify their curiosity and their creative impulses, and cultivate and enlarge their sympathies. That is what you are for. Under your guidance and the suggestions you will bring to bear on them, they have to shed the old Adam of instinctive suspicions, hostilities and passions, and to find themselves again in the great being of the universe. The little circles of their egotisms have to be opened out until they become arcs in the sweep of the racial purpose. And this that you teach to others you must learn also sedulously yourselves. Philosophy, discovery, art, every sort of skill, every sort of service, love: these are the means of salvation from that narrow loneliness of desire, that brooding preoccupation with self and egotistical relationships, which is hell for the individual, treason to the race, and exile from God. . . ."

§ 12

As things round themselves off and accomplish themselves, one begins for the first time to see them clearly. From the perspectives of a new age one can look back upon the great and widening stream of literature with a complete understanding. Things link up that seemed disconnected, and things that were once condemned as harsh and aimless are seen to be but factors in the statement of a gigantic problem. An enormous bulk of the sincerer writing of the eighteenth, nineteenth and twentieth centuries falls together now into an unanticipated unanimity; one sees it as a huge tissue of variations upon one theme, the conflict of human egotism and personal passion and narrow imaginations on the one hand

against the growing sense of wider necessities and a possible, more spacious life.

That conflict is in evidence in so early a work as Voltaire's *Candide*, for example, in which the desire for justice as well as happiness beats against human contrariety and takes refuge at last in a forced and inconclusive contentment with little things. *Candide* was but one of the pioneers of a literature of uneasy complaint that was presently an innumerable multitude of books. The novels more particularly of the nineteenth century, if one excludes the mere story-tellers from our consideration, witness to this uneasy realisation of changes that call for effort and of the lack of that effort. In a thousand aspects, now tragically, now comically, now with a funny affectation of divine detachment, a countless host of witnesses tell their story of lives fretting between dreams and limitations. Now one laughs, now one weeps, now one reads with a blank astonishment at this huge and almost unpremeditated record of how the growing human spirit, now warily, now eagerly, now furiously, and always as it seems unsuccessfully, tried to adapt itself to the maddening misfit of its patched and ancient garments. And always in these books as one draws nearer to the heart of the matter there comes a disconcerting evasion. It was the fantastic convention of the time that a writer should not touch upon religion. To do so was to rouse the jealous fury of the great multitude of professional religious teachers. It was permitted to state the discord but it was forbidden to glance at any possible reconciliation. Religion was the privilege of the pulpit. . . .

It was not only from the novels that religion was omitted. It was ignored by the newspapers; it was pedantically disregarded in the discussion of business questions, it played a trivial and apologetic part in public affairs. And this was done not out of contempt but respect. The hold of the old religious organisations upon men's respect was still enormous, so enormous that there seemed to be a quality of irreverence in applying religion to the developments of every day. This strange suspension of religion lasted over into the beginnings of the new age. It was the clear vision of Marcus Karenin much more than any other contemporary influence which brought it back into the texture of human life. He saw religion without hallucinations, without superstitious reverence, as a common thing as necessary as food and air, as land and energy to the life of man and the well-being of the Republic. He saw that indeed it had already percolated away from the temples and hierarchies and symbols in which men had sought to imprison it, that it was already at work anonymously and obscurely in the universal acceptance of the greater state. He gave it clearer expression, rephrased it to the lights and perspectives of the new dawn. . . .

But if we return to our novels for our evidence of the spirit

of the times it becomes evident as one reads them in their chronological order, so far as that is now ascertainable, that as one comes to the latter nineteenth and the earlier twentieth century the writers are much more acutely aware of secular change than their predecessors were. The earlier novelists tried to show "life as it is," the latter showed life as it changes. More and more of their characters are engaged in adaptation to change or suffering from the effects of world changes. And as we come up to the time of the Last Wars, this newer conception of the every-day life as a reaction to an accelerated development is continually more manifest. Barnet's book, which has served us so well, is frankly a picture of the world coming about like a ship that sails into the wind. Our later novelists give a vast gallery of individual conflicts in which old habits and customs, limited ideas, ungenerous temperaments and innate obsessions are pitted against this great opening out of life that has happened to us. They tell us of the feelings of old people who have been wrenched away from familiar surroundings, and how they have had to make peace with uncomfortable comforts and conveniences that are still strange to them. They give us the discord between the opening egotisms of youths and the ill-defined limitations of a changing social life. They tell of the universal struggle of jealousy to capture and cripple our souls, of romantic failures and tragical misconceptions of the trend of the world, of the spirit of adventure and the urgency of curiosity and how these serve the universal drift. And all their stories lead in the end either to happiness missed or happiness won, to disaster or salvation. The clearer their vision and the subtler their art, the more certainly do these novels tell of the possibility of salvation for all the world. For any road in life leads to religion for those upon it who will follow it far enough. . . .

It would have seemed a strange thing to the men of the former time that it should be an open question as it is to-day whether the world is wholly Christian or not Christian at all. But assuredly we have the spirit, and as surely have we left many temporary forms behind. Christianity was the first expression of world religion, the first complete repudiation of tribalism and war and disputation. That it fell presently into the ways of more ancient rituals cannot alter that. The common sense of mankind has toiled through two thousand years of chastening experience to find at last how sound a meaning attaches to the familiar phrases of the Christian faith. The scientific thinker as he widens out to the moral problems of the collective life comes inevitably upon the words of Christ, and as inevitably does the Christian, as his thought grows clearer, arrive at the world republic. As for the claims of the sects, as for the use of a name and successions, we live in a time that has shaken itself free from such claims and consistencies.

CHAPTER FIVE

THE LAST DAYS OF MARCUS KARENIN

§ 1

THE second operation upon Marcus Karenin was performed at the new station for surgical work at Paran, high in the Himalayas above the Sutlej gorge where it comes down out of Thibet.

It is a place of such wildness and beauty as no other scenery in the world affords. The granite terrace which runs round the four sides of the low block of laboratories looks out in every direction upon mountains. Far below in the hidden depths of a shadowy blue cleft, the river pours down in its tumultuous passage to the swarming plains of India. No sound of its roaring haste comes up to those serenities. Beyond that blue gulf, in which whole forests of giant deodars seem no more than small patches of moss, rise vast precipices of many-coloured rock, fretted above, lined by snowfalls and jagged into pinnacles. These are the northward wall of a towering wilderness of ice and snow which clambers southward higher and wilder and vaster to the culminating summits of our globe, to Dhaulagiri and Everest. Here are cliffs of which no other land can show the like and deep chasms in which Mt. Blanc might be plunged and hidden. Here are ice-fields as big as inland seas on which the tumbled boulders lie so thickly that strange little flowers can bloom among them under the untempered sunshine. To the northward, and blocking out any vision of the uplands of Thibet, rises that citadel of porcelain, that gothic pile, the Lio Porgyul, walls, towers and peaks, a clear twelve thousand feet of veined and splintered rock above the river. And beyond it and eastward and westward rise peaks behind peaks, against the dark blue Himalayan sky. Far away below to the south the clouds of the Indian rains pile up abruptly and are stayed by an invisible hand.

Hither it was that with a dreamlike swiftness Karenin flew high over the irrigations of Rajputana and the towers and cupolas of the ultimate Delhi ; and the little group of buildings, albeit the southward wall dropped nearly five hundred feet, seemed to him as he soared down to it like a toy lost among these mountain wildernesses. No road came up to this place ; it was reached only by flight.

His pilot descended to the great courtyard, and Karenin assisted by his secretary clambered down through the wing fabric and made his way to the officials who came out to receive him.

In this place, beyond infections and noise and any distractions, surgery had made for itself a house of research and a

healing fastness. The building itself would have seemed very wonderful to eyes accustomed to the flimsy architecture of an age when power was precious. It was made of granite, already a little roughened on the outside by frost, but polished within and of a tremendous solidity. And in a honeycomb of subtly lit apartments were the spotless research benches, the operating-tables, the instruments of brass and fine glass and platinum and gold. Men and women came from all parts of the world for study or experimental research. They wore a common uniform of white and ate at long tables together, but the patients lived in an upper part of the buildings and were cared for by nurses and skilled attendants. . . .

The first man to greet Karenin was Ciana, the scientific director of the institution. Beside him was Rachel Borken, the chief organiser. "You are tired?" she asked, and old Karenin shook his head. "Cramped," he said. "I have wanted to visit such a place as this."

He spoke as if he had no other business with them.

There was a little pause.

"How many scientific people have you got here now?" he asked.

"Just three hundred and ninety-two," said Rachel Borken.

"And the patients and attendants and so on?"

"Two thousand and thirty."

"I shall be a patient," said Karenin. "I shall have to be a patient. But I should like to see things first. Presently I will be a patient."

"You will come to my rooms?" suggested Ciana.

"And then I must talk to this doctor of yours," said Karenin. "But I would like to see a bit of this place and talk to some of your people before it comes to that."

He winced and moved forward.

"I have left most of my work in order," he said.

"You have been working hard up to now?" asked Rachel Borken.

"Yes. And now I have nothing more to do—and it seems strange. . . . And it's a bother, this illness and having to come down to oneself. This doorway and that row of windows is well done; the grey granite and just the line of gold and then those mountains beyond through that arch. It's very well done. . . ."

§ 2

Karenin lay on the bed with a soft white rug about him, and Fowler, who was to be his surgeon, sat on the edge of the bed and talked to him. An assistant was seated quietly in the shadow behind the bed. The examination had been made and Karenin knew what was before him. He was tired but serene.

"So I shall die," he said, "unless you operate?"

Fowler assented.

"And then," said Karenin smiling, "probably I shall die."

"Not certainly."

"Even if I do not die shall I be able to work?"

"There is just a chance. . . ."

"So firstly I shall probably die, and if I do not, then perhaps I shall be a useless invalid?"

"I think if you live, you may be able to go on—as you do now."

"Well, then, I suppose I must take the risk of it. Yet couldn't you, Fowler, couldn't you drug me and patch me instead of all this—vivisection? A few days of drugged and active life—and then the end?"

Fowler thought. "We are not sure enough yet to do things like that," he said.

"But a day is coming when you will be certain."

Fowler nodded.

"You make me feel as though I was the last of deformity. Deformity is uncertainty—inaccuracy. My body works doubtfully, it is not even sure that it will die or live. I suppose the time is not far off when such bodies as mine will no longer be born into the world."

"You see," said Fowler after a little pause, "it is necessary that spirits such as yours should be born into the world."

"I suppose," said Karenin, "that my spirit has had its use. But if you think that is because my body is as it is I think you are mistaken. There is no peculiar virtue in defect. I have always chafed against—all this. If I could have moved more freely and lived a larger life in health I could have done more. But some day perhaps you will be able to put a body that is wrong altogether right again. Your science is only beginning. It's a subtler thing than physics and chemistry and it takes longer to produce its miracles. And meanwhile a few more of us must die in patience."

"Fine work is being done and much of it," said Fowler. "I can say as much because I have nothing to do with it. I can understand a lesson, appreciate the discoveries of abler men and use my hands, but those others, Pigou, Masterton, Lie and the others, they are clearing the ground fast for the knowledge to come. Have you had time to follow their work?"

Karenin shook his head. "But I can imagine the scope of it," he said.

"We have so many men working now," said Fowler. "I suppose at present there must be at least a thousand thinking hard, observing, experimenting, for one who did so in nineteen hundred."

"Not counting those who keep the records?"

"Not counting those. Of course the present indexing of

research is in itself a very big work and it is only now that we are getting it properly done. But already we are feeling the benefit of that. Since it ceased to be a paid employment and became a devotion we have had only those people who obeyed the call of an aptitude at work upon these things. Here—I must show you it to-day because it will interest you—we have our copy of the encyclopædic index—every week sheets are taken out and replaced by fresh sheets with new results that are brought to us by the aeroplanes of the Research Department. It is an index of knowledge that grows continually, an index that becomes continually truer. There was never anything like it before."

"When I came into the education committee," said Karenin, "that index of human knowledge seemed an impossible thing. Research had produced a chaotic mountain of results, in a hundred languages and a thousand different types of publication. . . ." He smiled at his memories. "How we groaned at the job!"

"Already the ordering of that chaos is nearly done. You shall see."

"I have been so busy with my own work— Yes, I shall be glad to see."

The patient regarded the surgeon for a time with interested eyes.

"You work here always?" he asked abruptly.

"No," said Fowler.

"But mostly you work here?"

"I have worked here about seven years out of the past ten. At times I go away—down there. One has to. At least I have to. There is a sort of greyness comes over all this, one feels hungry for life, real personal passionate life, love-making, eating and drinking for the fun of the thing, jostling crowds, having adventures, laughter—above all laughter——"

"Yes," said Karenin understandingly.

"And then one day, suddenly one thinks of these high mountains again. . . ."

"That is how I would have lived, if it had not been for my —defects," said Karenin. "Nobody knows but those who have borne it, the exasperation of abnormality. It will be good when you have nobody alive whose body cannot live the wholesome everyday life, whose spirit cannot come up into these high places as it wills."

"We shall manage that soon," said Fowler.

"For endless generations man has struggled upward against the indignities of his body—and the indignities of his soul. Pains, incapacities, vile fears, black moods, despairs. How well I've known them. They've taken more time than all your holidays. It is true, is it not, that every man is something of a cripple and something of a beast? I've dipped a little deeper than most; that's all. It's only now when he has fully

learned the truth of that, that he can take hold of himself to be neither beast nor cripple. Now that he overcomes his servitude to his body, he can for the first time think of living the full life of his body. . . . Before another generation dies you'll have the thing in hand. You'll do as you please with the old Adam and all the vestiges from the brutes and reptiles that lurk in his body and spirit. Isn't that so ? "

" You put it boldly," said Fowler.

Karenin laughed cheerfully at his caution. . . .

" When," asked Karenin suddenly, " when will you operate ? "

" The day after to-morrow," said Fowler. " For a day I want you to drink and eat as I shall prescribe. And you may think and talk as you please."

" I should like to see this place."

" You shall go through it this afternoon. I will have two men carry you in a litter. And to-morrow you shall lie out upon the terrace. Our mountains here are the most beautiful in the world. . . ."

§ 3

The next morning Karenin got up early and watched the sun rise over the mountains, and breakfasted lightly, and then young Gardener, his secretary, came to consult him upon the spending of his day. Would he care to see people ? Or was this gnawing pain within him too much to permit him to do that ?

" I'd like to talk," said Karenin. " There must be all sorts of lively-minded people here. Let them come and gossip with me. It will distract me—and I can't tell you how interesting it makes everything that is going on to have seen the dawn of one's own last day."

" Your last day ! "

" Fowler will kill me."

" But he thinks not."

" Fowler will kill me. If he does not he will not leave very much of me. So that this is my last day anyhow, the days afterwards if they come at all to me, will be refuse. I know. . . ."

Gardener was about to speak when Karenin went on again.

" I hope he kills me, Gardener. Don't be—old-fashioned. The thing I am most afraid of is that last rag of life. I may just go on—a scarred salvage of suffering stuff. And then—all the things I have hidden and kept down or discounted or set right afterwards will get the better of me. I shall be peevish. I may lose my grip upon my own egotism. It's never been a very firm grip. No, no, Gardener, don't say that ! You know better, you've had glimpses of it. Suppose I came through on the other side of this affair, belittled, vain

and spiteful, using the prestige I have got among men by my good work in the past just to serve some small invalid purpose. . . ."

He was silent for a time, watching the mists among the distant precipices change to clouds of light, and drift and dissolve before the searching rays of the sunrise.

"Yes," he said at last, "I am afraid of these anæsthetics and these fag ends of life. It's life we are all afraid of. Death! —nobody minds just death. Fowler is clever—but some day surgery will know its duty better and not be so anxious just to save something . . . provided only that it quivers. I've tried to hold my end up properly and do my work. After Fowler has done with me I am certain I shall be unfit for work—and what else is there for me? . . . I know I shall not be fit for work. . . .

"I do not see why life should be judged by its last trailing thread of vitality. . . . I know it for the splendid thing it is—I who have been a diseased creature from the beginning. I know it well enough not to confuse it with its husks. Remember that, Gardener, if presently my heart fails me and I despair, and if I go through a little phase of pain and ingratitude and dark forgetfulness before the end. . . . Don't believe what I may say at the last. . . . If the fabric is good enough the selvage doesn't matter. It can't matter. So long as you are alive you are just the moment, perhaps, but when you are dead then you are all your life from the first moment to the last. . . ."

§ 4

Presently, in accordance with his wish, people came to talk to him, and he could forget himself again. Rachel Borken sat for a long time with him and talked chiefly of women in the world, and with her was a girl named Edith Haydon, who was already very well known as a cytologist. And several of the younger men who were working in the place and a patient named Kahn, a poet, and Edwards, a designer of plays and shows, spent some time with him. The talk wandered from point to point and came back upon itself, and became now earnest and now trivial as the chance suggestions determined. But soon afterwards Gardener wrote down notes of things he remembered, and it is possible to put together again the outlook of Karenin upon the world and how he thought and felt about many of the principal things in life.

"Our age," he said, "has been so far an age of scene-shifting. We have been preparing a stage, clearing away the setting of a drama that was played out and growing tiresome. . . . If I could but sit out the first few scenes of the new spectacle. . . .

"How encumbered the world had become! It was ailing

as I am ailing with a growth of unmeaning things. It was entangled, feverish, confused. It was in sore need of release, and I suppose that nothing less than the violence of those bombs could have released it and made it a healthy world again. I suppose they were necessary. Just as everything turns to evil in a fevered body so everything seemed turning to evil in those last years of the old time. Everywhere there were obsolete organisations seizing upon all the new fine things that science was giving to the world, nationalities, all sorts of political bodies, the churches and sects, proprietorship, seizing upon those great powers and limitless possibilities and turning them to evil uses. And they would not suffer open speech, they would not permit of education, they would let no one be educated to the needs of the new time. . . . You who are younger cannot imagine the mixture of desperate hope and protesting despair in which we who could believe in the possibilities of science lived in those years before atomic energy came. . . .

"It was not only that the mass of people would not attend, would not understand, but that those who did understand lacked the power of real belief. They said the things, they saw the things, and the things meant nothing to them. . . .

"I have been reading some old papers lately. It is wonderful how our fathers bore themselves towards science. They hated it. They feared it. They permitted a few scientific men to exist and work—a pitiful handful. . . . 'Don't find out anything about us,' they said to them; 'don't inflict vision upon us, spare our little ways of life from the fearful shaft of understanding. But do tricks for us, little limited tricks. Give us cheap lighting. And cure us of certain disagreeable things, cure us of cancer, cure us of consumption, cure our colds and relieve us after repletion. . . .' We have changed all that, Gardener. Science is no longer our servant. We know it for something greater than our little individual selves. It is the awakening mind of the race, and in a little while—— In a little while—— I wish indeed I could watch for that little while, now that the curtain has risen. . . .

"While I lie here they are clearing up what is left of the bombs in London," he said. "Then they are going to repair the ruins and make it all as like as possible to its former condition before the bombs fell. Perhaps they will dig out the old house in St. John's Wood to which my father went after his expulsion from Russia. . . . That London of my memories seems to me like a place in another world. For you younger people it must seem like a place that could never have existed."

"Is there much left standing?" asked Edith Haydon.

"Square miles that are scarcely shaken in the south and north-west, they say; and most of the bridges and large areas of dock. Westminster, which held most of the government

offices, suffered badly from the small bomb that destroyed the Parliament, there are very few traces of the old thoroughfare of Whitehall or the Government region thereabout, but there are plentiful drawings to scale of its buildings, and the great hole in the east of London scarcely matters. That was a poor district and very like the north and the south. . . . It will be possible to reconstruct most of it. . . . It is wanted. Already it becomes difficult to recall the old time—even for us who saw it."

"It seems very distant to me," said the girl. . . .

"It was an unwholesome world," reflected Karenin. "I seem to remember everybody about my childhood as if they were ill. They were ill. They were sick with confusion. Everybody was anxious about money and everybody was doing uncongenial things. They ate a queer mixture of foods, either too much or too little, and at odd hours. One sees how ill they were by their advertisements. All this new region of London they are opening up now is plastered with advertisements of pills. Everybody must have been taking pills. In one of the hotel rooms in the Strand they have found the luggage of a lady covered up by falling rubble and unburned, and she was equipped with nine different sorts of pill and tabloid. The pill-carrying age followed the weapon-carrying age. They are equally strange to us. People's skins must have been in a vile state. Very few people were properly washed; they carried the filth of months on their clothes. All the clothes they wore were old clothes; our way of pulping our clothes again after a week or so of wear would have seemed fantastic to them. Their clothing hardly bears thinking about. And the congestion of them! Everybody was jostling against everybody in those awful towns. In an uproar. People were run over and crushed by the hundred; every year in London the cars and omnibuses alone killed or disabled twenty thousand people; in Paris it was worse; people used to fall dead for want of air in the crowded ways. The irritation of London, internal and external, must have been maddening. It was a maddened world. It is like thinking of a sick child. One has the same effect of feverish urgencies and acute irrational disappointments.

"All history," he said, "is a record of a childhood. . . .

"And yet not exactly a childhood. There is something clean and keen about even a sick child—and something touching. But so much of the old time makes one angry. So much they did seems grossly stupid, obstinately, outrageously stupid, which is the very opposite to being fresh and young.

"I was reading only the other day about Bismarck, that hero of nineteenth-century politics, that sequel to Napoleon, that god of blood and iron. And he was just a beery, obstinate, dull man. Indeed that is what he was, the commonest,

coarsest man who ever became great. I looked at his portraits, a heavy, almost froggish face, with projecting eyes and a thick moustache to hide a poor mouth. He aimed at nothing but Germany, Germany emphasised, indurated, enlarged ; Germany and his class in Germany ; beyond that he had no ideas, he was inaccessible to ideas ; his mind never rose for a recorded instant above a bumpkin's elaborate cunning. And he was the most influential man in the world, in the whole world, no man ever left so deep a mark on it, because everywhere there were gross men to resonate to the heavy notes he emitted. He trampled on ten thousand lovely things, and a kind of malice in these louts made it pleasant to them to see him trample. No—he was no child ; the dull national aggressiveness he stood for, no childishness. Childhood is promise. He was survival.

" All Europe offered its children to him, it sacrificed education, art, happiness and all its hopes of future welfare to follow the clatter of his sabre. The monstrous worship of that old fool's ' blood and iron ' passed all round the earth. Until the atomic bombs burned our way to freedom again. . . ."

" One thinks of him now as one thinks of the megatherium," said one of the young men.

" From first to last mankind made three million big guns and a hundred thousand complicated great ships for no other purpose but war."

" Were there no sane men in those days," asked the young man, " to stand against that idolatry ? "

" In a state of despair," said Edith Haydon.

" He is so far off—and there are men alive still who were alive when Bismarck died ! " . . . said the young man. . . .

§ 5

" And yet it may be I am unjust to Bismarck," said Karenin, following his own thoughts. " You see men belong to their own age ; we stand upon a common stock of thought and we fancy we stand upon the ground. I met a pleasant man the other day, a Maori, whose great-grandfather was a cannibal. It chanced he had a Daguerreotype of the old sinner, and the two were marvellously alike. One felt that a little juggling with time and either might have been the other. People are cruel and stupid in a stupid age who might be gentle and splendid in a gracious one. The world also has its moods. Think of the mental food of Bismarck's childhood ; the humiliations of Napoleon's victories, the crowded crowning victory of the Battle of the Nations. . . . Everybody in those days, wise or foolish, believed that the division of the world under a multitude of governments was inevitable, and that it was going on for thousands of years

more. It *was* inevitable until it was impossible. Any one who had denied that inevitability publicly would have been counted—oh ! a *silly* fellow. Old Bismarck was only just a little—forcible, on the lines of the accepted ideas. That is all. He thought that since there had to be national governments he would make one that was strong at home and invincible abroad. Because he had fed with a kind of rough appetite upon what we can see now were very stupid ideas, that does not make him a stupid man. We've had advantages ; we've had unity and collectivism blasted into our brains. Where should we be now but for the grace of science ? I should have been an embittered, spiteful, down-trodden member of the Russian Intelligentsia, a conspirator, a prisoner or an assassin. You, my dear, would have been breaking dingy windows as a suffragette."

"*Never*," said Edith stoutly. . . .

For a time the talk broke into humorous personalities, and the young people gibed at each other across the smiling old administrator, and then presently one of the young scientific men gave things a new turn. He spoke like one who was full to the brim.

"You know, sir, I've a fancy—it is hard to prove such things—that civilisation was very near disaster when the atomic bombs came banging into it, that if there had been no Holsten and no induced radio-activity, the world would have—smashed—much as it did. Only instead of its being a smash that opened a way to better things, it might have been a smash without a recovery. It is part of my business to understand economics, and from that point of view the century before Holsten was just a hundred years' crescendo of waste. Only the extreme individualism of that period, only its utter want of any collective understanding or purpose can explain that waste. Mankind used up material—insanely. They had got through three-quarters of all the coal in the planet, they had used up most of the oil, they had swept away their forests, and they were running short of tin and copper. Their wheat areas were getting weary and populous, and many of the big towns had so lowered the water level of their available hills that they suffered a drought every summer. The whole system was rushing towards bankruptcy. And they were spending every year vaster and vaster amounts of power and energy upon military preparations, and continually expanding the debt of industry to capital. The system was already staggering when Holsten began his researches. So far as the world in general went there was no sense of danger and no desire for inquiry. They had no belief that science could save them, nor any idea that there was a need to be saved. They could not, they would not, see the gulf beneath their feet. It was pure good luck for mankind at large that any research at all was

in progress. And as I say, sir, if that line of escape hadn't opened, before now there might have been a crash, revolution, panic, social disintegration, famine, and—it is conceivable—complete disorder. . . . The rails might have rusted on the disused railways by now, the telephone-poles have rotted and fallen, the big liners dropped into sheet iron in the ports; the burned deserted cities become the ruinous hiding-places of gangs of robbers. We might have been brigands in a shattered and attenuated world. Ah, you may smile, but that had happened before in human history. The world is still studded with the ruins of broken-down civilisations. Barbaric bands made their fastness upon the Acropolis, and the tomb of Hadrian became a fortress that warred across the ruins of Rome against the Colosseum. . . . Had all that possibility of reaction ended so certainly in 1940? Is it all so very far away even now?"

"It seems far enough away now," said Edith Haydon.

"But forty years ago?"

"No," said Karenin with his eyes upon the mountains, "I think you underrate the available intelligence in those early decades of the twentieth century. Officially, I know, politically, that intelligence didn't tell—but it was there. And I question your hypothesis. I doubt if that discovery could have been delayed. There is a kind of inevitable logic now in the progress of research. For a hundred years and more thought and science have been going their own way regardless of the common events of life. You see—*they have got loose*. If there had been no Holsten there would have been some similar man. If atomic energy had not come in one year it would have come in another. In decadent Rome the march of science had scarcely begun. . . . Nineveh, Babylon, Athens, Syracuse, Alexandria, these were the first rough experiments in association that made a security, a breathing-space, in which inquiry was born. Man had to experiment before he found out the way to begin. But already two hundred years ago he had fairly begun. . . . The politics and dignities and wars of the nineteenth and twentieth centuries were only the last phœnix blaze of the former civilisation flaring up about the beginnings of the new. Which we serve. . . .

"Man lives in the dawn for ever," said Karenin. "Life is beginning and nothing else but beginning. It begins everlastingly. Each step seems vaster than the last, and does but gather us together for the next. This Modern State of ours, which would have been a Utopian marvel a hundred years ago, is already the commonplace of life. But as I sit here and dream of the possibilities in the mind of man that now gather to a head beneath the shelter of its peace, these great mountains here seem but little things. . . ."

§ 6

About eleven Karenin had his midday meal, and afterwards he slept among his artificial furs and pillows for two hours. Then he awoke and some tea was brought to him, and he attended to a small difficulty in connection with the Moravian schools in the Labrador country and in Greenland that Gardener knew would interest him. He remained alone for a little while after that, and then the two women came to him again. Afterwards Edwards and Kahn joined the group, and the talk fell upon love and the place of women in the renascent world. The cloud-banks of India lay under a quivering haze, and the blaze of the sun fell full upon the eastward precipices. Ever and again as they talked some vast splinter of rock would crack and come away from these, or a wild rush of snow and ice and stone pour down in thunder, hang like a wet thread into the gulfs below, and cease. . . .

§ 7

For a time Karenin said very little, and Kahn, the popular poet, talked of passionate love. He said that passionate personal love had been the abiding desire of humanity since ever humanity had begun, and now only was it becoming a possible experience. It had been a dream that generation after generation had pursued, that always men had lost on the verge of attainment. To most of those who had sought it obstinately it had brought tragedy. Now, lifted above sordid distresses, men and women might hope for realised and triumphant love. This age was the Dawn of Love. . . .

Karenin remained downcast and thoughtful while Kahn said these things. Against that continued silence Kahn's voice presently seemed to beat and fail. He had begun by addressing Karenin, but presently he was including Edith Haydon and Rachel Borken in his appeal. Rachel listened silently; Edith watched Karenin and very deliberately avoided Kahn's eyes.

"I know," said Karenin at last, "that many people are saying this sort of thing. I know that there is a vast release of love-making in the world. This great wave of decoration and elaboration that has gone about the world, this Efflorescence, has of course laid hold of that. I know that when you say that the world is set free, you interpret that to mean that the world is set free for love-making. Down there—under the clouds, the lovers foregather. I know your songs, Kahn, your half-mystical songs, in which you represent this old hard world dissolving into a luminous haze of love—sexual love. . . . I don't think you are right or true in that. You are a young imaginative man, and you see life—ardently—

with the eyes of youth. But the power that has brought man into these high places under this blue-veiled blackness of the sky and which beckons us on towards the immense and awful future of our race, is riper and deeper and greater than any such emotions. . . .

"All through my life—it has been a necessary part of my work—I have had to think of this release of sexual love and the riddles that perfect freedom and almost limitless power will put to the soul of our race. I can see now, all over the world, a beautiful ecstasy of waste; 'Let us sing and rejoice and be lovely and wonderful.' . . . The orgy is only beginning, Kahn. . . . It was inevitable—but it is not the end of mankind. . . .

"Think what we are. It is but a yesterday in the endlessness of time that life was a dreaming thing, dreaming so deeply that it forgot itself as it dreamt, its lives, its individual instincts, its moments, were born and wondered and played and desired and hungered and grew weary and died. Incalculable successions of vision, visions of sunlit jungle, river wilderness, wild forest, eager desire; beating hearts, soaring wings and creeping terror flamed hotly and then were as though they had never been. Life was an uneasiness across which lights played and vanished. And then we came, man came, and opened eyes that were a question and hands that were a demand and began a mind and memory that dies not when men die, but lives and increases for ever, an overmind, a dominating will, a question and an aspiration that reaches to the stars. . . . Hunger and fear and this that you make so much of, this sex, are but the elementals of life out of which we have arisen. All these elementals, I grant you, have to be provided for, dealt with, satisfied, but all these things have to be left behind."

"But Love," said Kahn.

"I speak of sexual love and the love of intimate persons. And that is what you mean, Kahn."

Karenin shook his head. "You cannot stay at the roots and climb the tree," he said. . . .

"No," he said after a pause, "this sexual excitement, this love story, is just a part of growing up and we grow out of it. So far literature and art and sentiment and all our emotional forms have been almost altogether adolescent, plays and stories, delights and hopes, they have all turned on that marvellous discovery of the love interest, but life lengthens out now and the mind of adult humanity detaches itself. Poets who used to die at thirty live now to eighty-five. You too, Kahn! There are endless years yet for you—and all full of learning. . . . We carry an excessive burthen of sex and sexual tradition still and we have to free ourselves from it. We do free ourselves from it. We have learned in a thousand different ways to hold back death, and this sex,

which in the old barbaric days was just sufficient to balance our dying, is now like a hammer that has lost its anvil, it plunges through human life. You poets, you young people want to turn it to delight. Turn it to delight. That may be one way out. In a little while, if you have any brains worth thinking about, you will be satisfied and then you will come up here to the greater things. The old religions and their new offsets want still I see to suppress all these things. Let them suppress. If they can suppress. In their own people. Either road will bring you here at last to the eternal search for knowledge and the great adventure of power."

"But incidentally," said Rachel Borken," incidentally you have half of humanity, you have woman-kind, very much specialised for—for this love and reproduction that is so much less needed than it was."

"Both sexes are specialised for love and reproduction," said Karenin.

"But the women carry the heavier burthen."

"Not in their imaginations," said Edwards.

"And surely," said Kahn, "when you speak of love as a phase—isn't it a necessary phase? Quite apart from reproduction the love of the sexes is necessary. Isn't it love, sexual love, which has released the imagination? Without that stir, without that impulse to go out from ourselves, to be reckless of ourselves and wonderful, would our lives be anything more than the contentment of the stalled ox?"

"The key that opens the door," said Karenin, "is not the goal of the journey."

"But women!" cried Rachel. "Here we are! What is our future—as women? Is it only that we have unlocked the doors of the imagination for you men? Let us speak of this question now. It is a thing constantly in my thoughts, Karenin. What do you think of us? You who must have thought so much of these perplexities."

Karenin seemed to weigh his words. He spoke very deliberately. "I do not care a rap about your future—as women. I do not care a rap about the future of men—as males. I want to destroy these peculiar futures. I care for your future as intelligences, as parts of and contribution to the universal mind of the race. Humanity is not only naturally overspecialised in these matters, but all its institutions, its customs, everything, exaggerate, intensify this difference. I want to unspecialise women. No new idea. Plato wanted exactly that. I do not want to go on as we go now, emphasising this natural difference; I do not deny it, but I want to reduce it and overcome it."

"And—we remain women," said Rachel Borken.

"Need you remain thinking of yourselves as women?"

"It is forced upon us," said Edith Haydon.

"I do not think a woman becomes less of a woman because

she dresses and works like a man," said Edwards. "You women here, I mean you scientific women, wear white clothing like the men, twist up your hair in the simplest fashion, go about your work as though there was only one sex in the world. You are just as much women, even if you are not so feminine, as the fine ladies down below there in the plains who dress for excitement and display, whose only thoughts are of lovers, who exaggerate every difference. . . . Indeed we love you more. . . ."

"But we go about our work," said Edith Haydon.

"So does it matter?" asked Rachel.

"If you go about your work and if the men go about their work, then for Heaven's sake be as much woman as you wish," said Karenin. "When I ask you to unspecialise, I am thinking not of the abolition of sex, but the abolition of the irksome, restricting, obstructive obsession with sex. It may be true that sex made society, that the first society was the sex-cemented family, the first state a confederacy of blood relations, the first laws sexual taboos. Until a few years ago morality meant proper sexual behaviour. Up to within a few years of us the chief interest and motive of an ordinary man was to keep and rule a woman and her children, and the chief concern of a woman was to get a man to do that. That was the drama, that was life. And the jealousy of these demands was the master motive in the world. You said, Kahn, a little while ago that sexual love was the key that let one out from the solitude of self, but I tell you that so far it has only done so in order to lock us all up again in a solitude of two. . . . All that may have been necessary but it is necessary no longer. All that has changed and changes still very swiftly. Your future, Rachel, *as women*, is a diminishing future."

"Karenin," asked Rachel, "do you mean that women are to become men?"

"Men and women have to become human beings."

"You would abolish women? But, Karenin, listen! There is more than sex in this. Apart from sex we are different from you. We take up life differently. Forget we are—females, Karenin, and still we are a different sort of human being with a different use. In some things we are amazingly secondary. Here am I in this place because of my trick of management, and Edith is here because of her patient, subtle hands. That does not alter the fact that nearly the whole body of science is man made; that does not alter the fact that men do so predominatingly make history, that you could nearly write a complete history of the world without mentioning a woman's name. And on the other hand we have a gift of devotion, of inspiration, a distinctive power for truly loving beautiful things, a care for life and a peculiar keen close eye for behaviour. You know men are blind beside us in these last matters. You know they are restless—and fitful.

We have a steadfastness. We may never draw the broad outlines nor discover the new paths, but in the future isn't there a confirming and sustaining and supplying rôle for us ? As important perhaps as yours ? Equally important. We hold the world up, Karenin, though you may have raised it."

"You know very well, Rachel, that I believe as you believe. I am not thinking of the abolition of woman. But I do want to abolish—the heroine, the sexual heroine. I want to abolish the woman whose support is jealousy and whose gift possession. I want to abolish the woman who can be won as a prize or locked up as a delicious treasure. And away down there the heroine flares like a divinity."

"In America," said Edwards, "men are fighting duels over the praises of women and holding tournaments before Queens of Beauty."

"I saw a beautiful girl in Lahore," said Kahn ; "she sat under a golden canopy like a goddess and three fine men armed and dressed as in the ancient paintings sat on steps below her to show their devotion. And they wanted only her permission to fight for her."

"That is the men's doing," said Edith Haydon.

"I *said*," cried Edwards, "that man's imagination was more specialised for sex than the whole being of woman. What woman would do a thing like that ? Women do but submit to it or take advantage of it."

"There is no evil between men and women that is not a common evil," said Karenin. "It is you poets, Kahn, with your love-songs which turn the sweet fellowship of comrades into this woman-centred excitement. But there is something in women, in many women, which responds to these provocations ; they succumb to a peculiarly self-cultivating egotism. They become the subjects of their own artistry. They develop and elaborate themselves as scarcely any man would ever do. They *look* for golden canopies. And even when they seem to react against that, they may do it still. I have been reading in the old papers of the movements to emancipate women that were going on before the discovery of atomic force. These things which began with a desire to escape from the limitations and servitude of sex, ended in an inflamed assertion of sex, and women more heroines than ever. Helen of Holloway was at last as big a nuisance in her way as Helen of Troy, and so long as you think of yourselves as women "—he held out a finger at Rachel and smiled gently—"instead of thinking of yourselves as intelligent beings, you will be in danger of—Helenism. To think of yourselves as women is to think of yourselves in relation to men. You can't escape that consequence. You have to learn to think of yourselves —for our sakes and your own sakes—in relation to the sun and stars. You have to cease to be our adventure, Rachel, and come with us upon our adventures. . . ."

He waved his hand towards the dark sky above the mountain crests.

§ 8

"These questions are the next questions to which research will bring us answers," said Karenin. "While we sit here and talk idly and inexactly of what is needed and what may be, there are hundreds of keen-witted men and women who are working these things out, dispassionately and certainly, for the love of knowledge. The next sciences to yield great harvests now will be psychology and neural physiology. These perplexities of the situation between man and woman and the trouble with the obstinacy of egotism, these are temporary troubles, the issue of our own times. Suddenly all these differences that seem so fixed will dissolve, all these incompatibles will run together, and we shall go on to mould our bodies and our bodily feelings and personal reactions as boldly as we begin now to carve mountains and set the seas in their places and change the currents of the wind."

"It is the next wave," said Fowler, who had come out upon the terrace and seated himself silently behind Karenin's chair.

"Of course in the old days," said Edwards, "men were tied to their city or their country, tied to the homes they owned or the work they did. . . ."

"I do not see," said Karenin, "that there is any final limit to man's power of self-modification."

"There is none," said Fowler walking forward and sitting down upon the parapet in front of Karenin so that he could see his face. "There is no absolute limit to either knowledge or power. . . . I hope you do not tire yourself talking."

"I am interested," said Karenin. "I suppose in a little while men will cease to be tired. I suppose in a little time you will give us something that will hurry away the fatigue products and restore our jaded tissues almost at once. This old machine may be made to run without slacking or cessation."

"That is possible, Karenin. But there is much to learn."

"And all the hours we give to digestion and half living; don't you think there will be some way of saving these?"

Fowler nodded assent.

"And then sleep again. When man with his blazing lights made an end to night in his towns and houses—it is only a hundred years or so ago that that was done—then it followed he would presently resent his eight hours of uselessness. Shan't we presently take a tabloid or lie in some field of force that will enable us to do with an hour or so of slumber and rise refreshed again?"

"Frobisher and Ameer Ali have done work in that direction."

"And then the inconveniences of age and those diseases of the system that come with years; steadily you drive them back and you lengthen and lengthen the years that stretch between the passionate tumults of youth and the contractions of senility. Man who used to weaken and die as his teeth decayed now looks forward to a continually lengthening, continually fuller term of years. And all those parts of him that once gathered evil against him, the vestigial structures and odd treacherous corners of his body, you know better and better how to deal with. You carve his body about and leave it remodelled and unscarred. The psychologists are learning how to mould minds, to reduce and remove bad complexes of thought and motive, to relieve pressures broaden ideas. So that we are becoming more and more capable of transmitting what we have learned and preserving it for the race. The race, the racial wisdom, science, gather power continually to subdue the individual man to its own end. Is that not so?"

Fowler said that it was, and for a time he was telling Karenin of new work that was in progress in India and Russia. "And how is it with heredity?" asked Karenin.

Fowler told them of the mass of inquiry accumulated and arranged by the genius of Tchen, who was beginning to define clearly the laws of inheritance and how the sex of children and the complexions and many of the parental qualities could be determined.

"He can actually *do*——?"

"It is still so to speak a mere laboratory triumph," said Fowler, "but to-morrow it will be practicable."

"You see," cried Karenin, turning a laughing face to Rachel and Edith, "while we have been theorising about men and women, here is science getting the power for us to end that old dispute for ever. If woman is too much for us, we'll reduce her to a minority, and if we do not like any type of men and women, we'll have no more of it. These old bodies, these old animal limitations, all this earthy inheritance of gross inevitabilities falls from the spirit of man like the shrivelled cocoon from an imago. And for my own part when I hear of these things I feel like that—like a wet crawling new moth that still fears to spread its wings. Because where do these things take us?"

"Beyond humanity," said Kahn.

"No," said Karenin. "We can still keep our feet upon the earth that made us. But the air no longer imprisons us, this round planet is no longer chained to us like the ball of a galley-slave. . . .

"In a little while men who will know how to bear the different gravitations, the altered pressures, the attenuated unfamiliar gases and all the fearful strangenesses of space will be venturing out from this earth. This ball will be no

longer enough for us ; our spirit will reach out. . . . Cannot you see how that little argosy will go glittering up into the sky, twinkling and glittering smaller and smaller until the blue swallows it up ? They may succeed out there ; they may perish, but other men will follow them. . . .

" It is as if a great window opened," said Karenin. . . .

§ 9

As the evening drew on Karenin and those who were about him went up upon the roof of the buildings, so that they might the better watch the sunset and the flushing of the mountains and the coming of the afterglow. They were joined by two of the surgeons from the laboratories below, and presently by a nurse who brought Karenin refreshment in a thin glass cup. It was a cloudless windless evening under the deep-blue sky, and far away to the north glittered two biplanes on the way to the observatories on Everest, two hundred miles distant over the precipices to the east. The little group of people watched them pass over the mountains and vanish into the blue, and then for a time they talked of the work that the observatory was doing. From that they passed to the whole process of research about the world, and so Karenin's thoughts returned again to the mind of the world and the great future that was opening upon man's imagination. He asked the surgeons many questions upon the detailed possibilities of their science, and he was keenly interested and excited by the things they told him.

And as they talked the sun touched the mountains, and became very swiftly a blazing and indented hemisphere of liquid flame and sank.

Karenin looked blinking at the last quivering rim of incandescence, and shaded his eyes and became silent.

Presently he gave a little start.

" What ? " asked Rachel Borken.

" I had forgotten," he said.

" What had you forgotten ? "

" I had forgotten about the operation to-morrow. I have been so interested as Man to-day that I have nearly forgotten Marcus Karenin. Marcus Karenin must go under your knife to-morrow, Fowler, and very probably Marcus Karenin will die." He raised his slightly shrivelled hand. " It does not matter, Fowler. It scarcely matters even to me. For indeed is it Karenin who has been sitting here and talking ? is it not rather a common mind, Fowler, that has played about between us ? You and I and all of us have added thought to thought, but the thread is neither you nor me. What is true we all have ; when the individual has altogether brought himself to the test and winnowing of expression, then the individual is done. I feel as though I had already been emptied out of

that little vessel, that Marcus Karenin, which in my youth held me so tightly and completely. Your beauty, dear Edith, and your broad brow, dear Rachel, and you, Fowler, with your firm and skilful hands, are now almost as much me as this hand that beats the arm of my chair. And as little me. And the spirit that desires to know, the spirit that resolves to do, that spirit that lives and has talked in us to-day, lived in Athens, lived in Florence, lives on, I know, for ever. . . .

"And you, old Sun, with your sword of flame searing these poor eyes of Marcus for the last time of all, beware of me! You think I die—and indeed I am only taking off one more coat to get at you. I have threatened you for ten thousand years, and soon I warn you I shall be coming. When I am altogether stripped and my disguises thrown away. Very soon now, old Sun, I shall launch myself at you, and I shall reach you and I shall put my foot on your spotted face and tug you about by your fiery locks. One step I shall take to the moon, and then I shall leap at you. I've talked to you before. I've talked to you a million times, and now I am beginning to remember. Yes—long ago, long ago, before I had stripped off a few thousand generations, dust now and forgotten, I was a hairy savage and I pointed my hand at you and—clearly I remember it!—I saw you in a net. Have you forgotten that? . . .

"Old Sun, I gather myself together out of the pools of the individual that have held me dispersed so long. I gather my billion thoughts into science and my million wills into a common purpose. Well may you slink down behind the mountains from me, well may you cower. . . ."

§ 10

Karenin desired that he might dream alone for a little while before he returned to the cell in which he was to sleep. He was given relief for a pain that began to trouble him and wrapped warmly about with furs, for a great coldness was creeping over all things, and so they left him and he sat for a long time watching the afterglow give place to the darkness of night.

It seemed to those who had to watch over him unobtrusively lest he should be in want of any attention that he mused very deeply.

The white and purple peaks against the golden sky sank down into cold blue remoteness, glowed out again and faded again, and the burning cressets of the Indian stars, that even the moon-rise cannot altogether quench, began their vigil. The moon rose behind the towering screen of dark precipices to the east, and long before it emerged above these, its slanting beams had filled the deep gorges below with

luminous mist and turned the towers and pinnacles of Lio Porgyul to a magic dream castle of radiance and wonder. . . .

Came a great uprush of ghostly light above the black rim of rocks, and then like a bubble that is blown and detaches itself the moon floated off clear into the unfathomable dark sky. . . .

And then Karenin stood up. He walked a few paces along the terrace and remained for a time gazing up at that great silver disc, that silvery shield that must needs be man's first conquest in outer space. . . .

Presently he turned about and stood with his hands folded behind him, looking at the northward stars. . . .

At length he went to his own cell. He lay down there and slept peacefully till the morning. And early in the morning they came to him and the anæsthetic was given him and the operation performed.

It was altogether successful, but Karenin was weak and he had to lie very still ; and about seven days later a blood clot detached itself from the healing scar and travelled to his heart, and he died in an instant in the night.

THE END

SHORT STORIES

The Inexperienced Ghost
The New Accelerator
Mr. Ledbetter's Vacation
A Dream of Armageddon

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STORY ONE

THE INEXPERIENCED GHOST

THE scene amidst which Clayton told his last story comes back very vividly to my mind. There he sat, for the greater part of the time, in the corner of the authentic settle by the spacious open fire, and Sanderson sat beside him smoking the Broseley clay that bore his name. There was Evans, and that marvel among actors, Wish, who is also a modest man. We had all come down to the Mermaid Club that Saturday morning, except Clayton, who had slept there overnight—which indeed gave him the opening of his story. We had golfed until golfing was invisible; we had dined, and we were in that mood of tranquil kindliness when men will suffer a story. When Clayton began to tell one, we naturally supposed he was lying. It may be that indeed he was lying—of that the reader will speedily be able to judge as well as I. He began, it is true, with an air of matter-of-fact anecdote, but that, we thought, was only the incurable artifice of the man.

"I say!" he remarked, after a long consideration of the upward rain of sparks from the log that Sanderson had thumped, "you know I was alone here last night?"

"Except for the domestics," said Wish.

"Who sleep in the other wing," said Clayton. "Yes. Well——" He pulled at his cigar for some little time as though he still hesitated about his confidence. Then he said, quite quietly, "I caught a ghost!"

"Caught a ghost, did you?" said Sanderson. "Where is it?"

And Evans, who admires Clayton immensely and has been four weeks in America, shouted, "*Caught* a ghost, did you, Clayton? I'm glad of it! Tell us all about it right now."

Clayton said he would in a minute, and asked him to shut the door.

He looked apologetically at me. "There's no eavesdropping of course, but we don't want to upset our very excellent service with any rumours of ghosts in the place. There's too much shadow and oak panelling to trifle with that. And this, you know, wasn't a regular ghost. I don't think it will come again—ever."

"You mean to say you didn't keep it?" said Sanderson.

"I hadn't the heart to," said Clayton.

And Sanderson said he was surprised.

We laughed, and Clayton looked aggrieved. "I know," he said, with the flicker of a smile, "but the fact is it really *was* a ghost, and I'm as sure of it as I am that I am talking to you now. I'm not joking. I mean what I say."

Sanderson drew deeply at his pipe, with one reddish eye on Clayton, and then emitted a thin jet of smoke more eloquent than many words.

Clayton ignored the comment. "It is the strangest thing that has ever happened in my life. You know I never believed in ghosts or anything of the sort, before, ever; and then, you know, I bag one in a corner and the whole business is in my hands."

He meditated still more profoundly and produced and began to pierce a second cigar with a curious little stabber he affected.

"You talked to it?" asked Wish.

"For the space, probably, of an hour."

"Chatty?" I said, joining the party of the sceptics.

"The poor devil was in trouble," said Clayton, bowed over his cigar-end and with the very faintest note of reproof.

"Sobbing?" some one asked.

Clayton heaved a realistic sigh at the memory. "Good Lord!" he said; "yes." And then, "Poor fellow! yes."

"Where did you strike it?" asked Evans, in his best American accent.

"I never realised," said Clayton, ignoring him, "the poor sort of thing a ghost might be," and he hung us up again for a time, while he sought for matches in his pocket and lit and warmed to his cigar.

"I took an advantage," he reflected at last.

We were none of us in a hurry. "A character," he said, "remains just the same character for all that it's been disembodied. That's a thing we too often forget. People with a certain strength or fixity of purpose may have ghosts of a certain strength and fixity of purpose—most haunting ghosts, you know, must be as one-idea'd as monomaniacs and as obstinate as mules to come back again and again. This poor creature wasn't." He suddenly looked up rather queerly, and his eye went round the room. "I say it," he said, "in all kindliness, but that is the plain truth of the case. Even at the first glance he struck me as weak."

He punctuated with the help of his cigar.

"I came upon him, you know, in the long passage. His back was towards me and I saw him first. Right off I knew him for a ghost. He was transparent and whitish; clean through his chest I could see the glimmer of the little window at the end. And not only his physique but his attitude struck me as being weak. He looked, you know, as though he didn't know in the slightest whatever he meant to do. One hand was on the panelling and the other fluttered to his mouth. Like—*so*!"

"What sort of physique?" said Sanderson.

"Lean. You know that sort of young man's neck that has two great flutings down the back, here and here—so! And a

little, meanish head with scrubby hair and rather bad ears. Shoulders bad, narrower than the hips; turndown collar, ready-made short jacket, trousers baggy and a little frayed at the heels. That's how he took me. I came very quietly up the staircase. I did not carry a light, you know—the candles are on the landing table and there is that lamp—and I was in my list slippers, and I saw him as I came up. I stopped dead at that—taking him in. I wasn't a bit afraid. I think that in most of these affairs one is never nearly so afraid or excited as one imagines one would be. I was surprised and interested. I thought, 'Good Lord! Here's a ghost at last! And I haven't believed for a moment in ghosts during the last five-and-twenty years.'"

"Um," said Wish.

"I suppose I wasn't on the landing a moment before he found out I was there. He turned on me sharply, and I saw the face of an immature young man, a weak nose, a scrubby little moustache, a feeble chin. So for an instant we stood—he looking over his shoulder at me—and regarded one another. Then he seemed to remember his high calling. He turned round, drew himself up, projected his face, raised his arms, spread his hands in approved ghost fashion—came towards me. As he did so his little jaw dropped, and he emitted a faint, drawn-out 'Boo.' No, it wasn't—not a bit dreadful. I'd dined. I'd had a bottle of champagne, and being all alone, perhaps two or three—perhaps even four or five—whiskies, so I was as solid as rocks and no more frightened than if I'd been assailed by a frog. 'Boo!' I said. 'Nonsense. You don't belong to *this* place. What are you doing here?'

"I could see him wince. 'Boo—oo,' he said.

"'Boo—be hanged! Are you a member?' I said; and just to show I didn't care a pin for him I stepped through a corner of him and made to light my candle. 'Are you a member?' I repeated, looking at him sideways.

"He moved a little so as to stand clear of me, and his bearing became crestfallen. 'No,' he said, in answer to the persistent interrogation of my eye; 'I'm not a member—I'm a ghost.'

"'Well, that doesn't give you the run of the Mermaid Club. Is there any one you want to see, or anything of that sort?' And doing it as steadily as possible for fear that he should mistake the carelessness of whisky for the distraction of fear, I got my candle alight. I turned on him, holding it. 'What are you doing here?' I said.

"He had dropped his hands and stopped his booing, and there he stood, abashed and awkward, the ghost of a weak, silly, aimless young man. 'I'm haunting,' he said.

"'You haven't any business to,' I said in a quiet voice.

"'I'm a ghost,' he said, as if in defence.

"'That may be, but you haven't any business to haunt here. This is a respectable private club; people often stop here with nursemaids and children, and, going about in the careless way you do, some poor little mite could easily come upon you and be scared out of her wits. I suppose you didn't think of that?'

"'No, sir,' he said, 'I didn't.'

"'You should have done. You haven't any claim on the place, have you? Weren't murdered here, or anything of that sort?'

"'None, sir; but I thought as it was old and oak-panelled——'

"'That's *no* excuse.' I regarded him firmly. 'Your coming here is a mistake,' I said, in a tone of friendly superiority. I feigned to see if I had my matches, and then looked up at him frankly. 'If I were you I wouldn't wait for cock-crow—I'd vanish right away.'

"He looked embarrassed. 'The fact *is*, sir——' he began.

"'I'd vanish,' I said, driving it home.

"'The fact is, sir, that—somehow—I can't.'

"'You *can't*?'

"'No, sir. There's something I've forgotten. I've been hanging about here since midnight last night, hiding in the cupboards of the empty bedrooms and things like that. I'm flurried. I've never come haunting before, and it seems to put me out.'

"'Put you out?'

"'Yes, sir. I've tried to do it several times, and it doesn't come off. There's some little thing has slipped me, and I can't get back.'

"That, you know, rather bowled me over. He looked at me in such an abject way that for the life of me I couldn't keep up quite the high hectoring vein I had adopted. 'That's queer,' I said, and as I spoke I fancied I heard some one moving about down below. 'Come into my room and tell me more about it,' I said. I didn't, of course, understand this, and I tried to take him by the arm. But, of course, you might as well have tried to take hold of a puff of smoke! I had forgotten my number, I think; anyhow, I remember going into several bedrooms—it was lucky I was the only soul in that wing—until I saw my traps. 'Here we are,' I said, and sat down in the armchair; 'sit down and tell me all about it. It seems to me you have got yourself into a jolly awkward position, old chap.'

"Well, he said he wouldn't sit down; he'd prefer to flit up and down the room if it was all the same to me. And so he did, and in a little while we were deep in a long and serious talk. And presently, you know, something of those whiskies and sodas evaporated out of me, and I began to realise just a little what a thundering rum and weird business it was that

I was in. There he was, semi-transparent—the proper conventional phantom, and noiseless except for his ghost of a voice—flitting to and fro in that nice, clean, chintz-hung old bedroom. You could see the gleam of the copper candlesticks through him, and the lights on the brass fender, and the corners of the framed engravings on the wall, and there he was telling me all about this wretched little life of his that had recently ended on earth. He hadn't a particularly honest face, you know; but being transparent, of course, he couldn't avoid telling the truth."

"Eh?" said Wish, suddenly sitting up in his chair.

"What?" said Clayton.

"Being transparent—couldn't avoid telling the truth—I don't see it," said Wish.

"*I* don't see it," said Clayton, with inimitable assurance. "But it *is* so, I can assure you nevertheless. I don't believe he got once a nail's breadth off the Bible truth. He told me how he had been killed—he went down into a London basement with a candle to look for a leakage of gas—and described himself as a senior English master in a London private school when that release occurred."

"Poor wretch!" said I.

"That's what I thought, and the more he talked the more I thought it. There he was, purposeless in life and purposeless out of it. He talked of his father and mother and his schoolmaster, and all who had ever been anything to him in the world, meanly. He had been too sensitive, too nervous; none of them had ever valued him properly or understood him, he said. He had never had a real friend in the world, I think; he had never had a success. He had shirked games and failed examinations. 'It's like that with some people,' he said; 'whenever I got into the examination-room or anywhere everything seemed to go.' Engaged to be married of course—to another over-sensitive person, I suppose—when the indiscretion with the gas escape ended his affairs. 'And where are you now?' I asked. 'Not in——?'

"He wasn't clear on that point at all. The impression he gave me was of a sort of vague, intermediate state, a special reserve for souls too non-existent for anything so positive as either sin or virtue. *I* don't know. He was much too egotistical and unobservant to give me any clear idea of the kind of place, kind of country, there is on the Other Side of Things. Wherever he was, he seems to have fallen in with a set of kindred spirits: ghosts of weak Cockney young men, who were on a footing of Christian names, and among these there was certainly a lot of talk about 'going haunting' and things like that. Yes—going haunting! They seemed to think 'haunting' a tremendous adventure, and most of them funked it all the time. And so primed, you know, he had come."

"But really!" said Wish to the fire.

"These are the impressions he gave me, anyhow," said Clayton modestly. "I may, of course, have been in a rather uncritical state, but that was the sort of background he gave to himself. He kept flitting up and down, with his thin voice going—talking, talking about his wretched self, and never a word of clear, firm statement from first to last. He was thinner and sillier and more pointless than if he had been real and alive. Only then, you know, he would not have been in my bedroom here—if he *had* been alive. I should have kicked him out."

"Of course," said Evans, "there *are* poor mortals like that."

"And there's just as much chance of their having ghosts as the rest of us,' I admitted.

"What gave a sort of point to him, you know, was the fact that he did seem within limits to have found himself out. The mess he had made of haunting had depressed him terribly. He had been told it would be a 'lark'; he had come expecting it to be a 'lark,' and here it was, nothing but another failure added to his record! He proclaimed himself an utter out-and-out failure. He said, and I can quite believe it, that he had never tried to do anything all his life that he hadn't made a perfect mess of—and through all the wastes of eternity he never would. If he had had sympathy, perhaps—— He paused at that, and stood regarding me. He remarked that, strange as it might seem to me, nobody, not any one, ever, had given him the amount of sympathy I was doing now. I could see what he wanted straight away, and I determined to head him off at once. I may be a brute, you know, but being the Only Real Friend, the recipient of the confidences of one of these egotistical weaklings, ghost or body, is beyond my physical endurance. I got up briskly. 'Don't you brood on these things too much,' I said. 'The thing you've got to do is to get out of this—get out of this sharp. You pull yourself together and *try*.' 'I can't,' he said. 'You try,' I said, and try he did."

"Try!" said Sanderson. "*How?*"

"Passes," said Clayton.

"Passes?"

"Complicated series of gestures and passes with the hands. That's how he had come in and that's how he had to get out again. Lord! what a business I had!"

"But how could *any* series of passes——" I began.

"My dear man," said Clayton, turning on me and putting a great emphasis on certain words, "you want *everything* clear. I don't know *how*. All I know is that you *do*—that *he* did, anyhow, at least. After a fearful time, you know, he got his passes right and suddenly disappeared."

"Did you," said Sanderson slowly, "observe the passes?"

"Yes," said Clayton, and seemed to think. "It was

tremendously queer," he said. "There we were, I and this thin vague ghost, in that silent room, in this silent, empty inn, in this silent little Friday-night town. Not a sound except our voices and a faint panting he made when he swung. There was the bedroom candle, and one candle on the dressing-table alight, that was all—sometimes one or other would flare up into a tall, lean, astonished flame for a space. And queer things happened. 'I can't,' he said; 'I shall never——!' And suddenly he sat down on a little chair at the foot of the bed and began to sob and sob. Lord! what a harrowing whimpering thing he seemed!

"'You pull yourself together,' I said, and tried to pat him on the back, and . . . my confounded hand went through him! By that time, you know, I wasn't nearly so—massive as I had been on the landing. I got the queerness of it full. I remember snatching back my hand out of him, as it were, with a little thrill, and walking over to the dressing-table. 'You pull yourself together,' I said to him, 'and try.' And in order to encourage and help him I began to try as well."

"What!" said Sanderson, "the passes?"

"Yes, the passes."

"But——" I said, moved by an idea that eluded me for a space.

"This is interesting," said Sanderson, with his finger in his pipe-bowl. "You mean to say this ghost of yours gave way——"

"Did his level best to give away the whole confounded barrier? *Yes.*"

"He didn't," said Wish; "he couldn't. Or you'd have gone there too."

"That's precisely it," I said, finding my elusive idea put into words for me."

"That *is* precisely it," said Clayton, with thoughtful eyes upon the fire.

For just a little while there was silence.

"And at last he did it?" said Sanderson.

"At last he did it. I had to keep him up to it hard, but he did it at last—rather suddenly. He despaired, we had a scene, and then he got up abruptly and asked me to go through the whole performance, slowly, so that he might see. 'I believe,' he said, 'if I could *see* I should spot what was wrong at once.' And he did. '*I* know,' he said. 'What do you know?' said I. '*I* know,' he repeated. Then he said, peevishly, 'I *can't* do it, if you look at me—I really *can't*; it's been that, partly, all along. I'm such a nervous fellow that you put me out.' Well, we had a bit of an argument. Naturally I wanted to see; but he was as obstinate as a mule, and suddenly I had come over as tired as a dog—he tired me out. 'All right,' I said, '*I* won't look at you,' and turned towards the mirror, on the wardrobe, by the bed.

"He started off very fast. I tried to follow him by looking in the looking-glass, to see just what it was had hung. Round went his arms and his hands, so, and so, and so, and then with a rush came to the last gesture of all—you stand erect and open out your arms—and so, don't you know, he stood. And then he didn't! He didn't! He wasn't! I wheeled round from the looking-glass to him. There was nothing! I was alone, with the flaring candles and a staggering mind. What had happened? Had anything happened? Had I been dreaming? . . . And then, with an absurd note of finality about it, the clock upon the landing discovered the moment was ripe for striking *one*. So!—Ping! And I was as grave and sober as a judge, with all my champagne and whisky gone into the vast serene. Feeling queer, you know—confoundedly *queer*! Queer! Good Lord!"

He regarded his cigar-ash for a moment. "That's all that happened," he said.

"And then you went to bed?" asked Evans.

"What else was there to do?"

I looked Wish in the eye. We wanted to scoff, and there was something, something perhaps in Clayton's voice and manner, that hampered our desire.

"And about these passes?" said Sanderson.

"I believe I could do them now."

"Oh!" said Sanderson, and produced a pen-knife and set himself to grub the dottel out of the bowl of his clay.

"Why don't you do them now?" said Sanderson, shutting his pen-knife with a click.

"That's what I'm going to do," said Clayton.

"They won't work," said Evans.

"If they do——" I suggested.

"You know, I'd rather you didn't," said Wish, stretching out his legs.

"Why?" asked Evans.

"I'd rather he didn't," said Wish.

"But he hasn't got 'em right," said Sanderson, plugging too much tobacco into his pipe.

"All the same, I'd rather he didn't," said Wish.

We argued with Wish. He said that for Clayton to go through those gestures was like mocking a serious matter. "But you don't believe——?" I said. Wish glanced at Clayton, who was staring into the fire, weighing something in his mind. "I do—more than half, anyhow, I do," said Wish.

"Clayton," said I, "you're too good a liar for us. Most of it was all right. But that disappearance . . . happened to be convincing. Tell us, it's a tale of cock and bull."

He stood up without heeding me, took the middle of the hearthrug, and faced me. For a moment he regarded his feet thoughtfully, and then for all the rest of the time his eyes were on the opposite wall, with an intent expression. He

raised his two hands slowly to the level of his eyes and so began. . . .

Now, Sanderson is a Freemason, a member of the lodge of the Four Kings, which devotes itself so ably to the study and elucidation of all the mysteries of Masonry past and present, and among the students of this lodge Sanderson is by no means the least. He followed Clayton's motions with a singular interest in his reddish eye. "That's not bad," he said, when it was done. "You really do, you know, put things together, Clayton, in a most amazing fashion. But there's one little detail out."

"I know," said Clayton. "I believe I could tell you which."

"Well?"

"This," said Clayton, and did a queer little twist and writhing and thrust of the hands.

"Yes."

"That, you know, was what *he* couldn't get right," said Clayton. "But how do *you*——?"

"Most of this business, and particularly how you invented it, I don't understand at all," said Sanderson, "but just that phase—I do." He reflected. "These happen to be a series of gestures—connected with a certain branch of esoteric Masonry—— Probably you know. Or else—— *How?*" He reflected still further. "I do not see I can do any harm in telling you just the proper twist. After all, if you know, you know; if you don t, you don't."

"I know nothing," said Clayton, "except what the poor devil let out last night."

"Well, anyhow," said Sanderson, and placed his churchwarden very carefully upon the shelf over the fireplace. Then very rapidly he gesticulated with his hands.

"So?" said Clayton, repeating.

"So," said Sanderson, and took his pipe in hand again.

"Ah, *now*," said Clayton, "I can do the whole thing—right."

He stood up before the waning fire and smiled at us all. But I think there was just a little hesitation in his smile. "If I begin——" he said.

"I wouldn't begin," said Wish.

"It's all right!" said Evans. "Matter is indestructible. You don't think any jiggery-pokery of this sort is going to snatch Clayton into the world of shades. Not it! You may try, Clayton, so far as I'm concerned, until your arms drop off at the wrists."

"I don't believe that," said Wish, and stood up and put his arm on Clayton's shoulder. "You've made me half believe in that story somehow, and I don't want to see the thing done."

"Goodness!" said I, "here's Wish frightened!"

"I am," said Wish, with real or admirably feigned intensity. "I believe that if he goes through these motions right he'll *go*."

"He'll not do anything of the sort," I cried. "There's only one way out of this world for men, and Clayton is thirty years from that. Besides . . . And such a ghost! Do you think—— ?"

Wish interrupted me by moving. He walked out from among our chairs and stopped beside the table and stood there. "Clayton," he said, "you're a fool."

Clayton, with a humorous light in his eyes, smiled back at him. "Wish," he said, "is right and all you others are wrong. I shall go. I shall get to the end of these passes, and as the last swish whistles through the air, Presto!—this hearthrug will be vacant, the room will be blank amazement, and a respectably dressed gentleman of fifteen stone will plump into the world of shades. I'm certain. So will you be. I decline to argue further. Let the thing be tried."

"*No*," said Wish, and made a step and ceased, and Clayton raised his hands once more to repeat the spirit's passing.

By that time, you know, we were all in a state of tension—largely because of the behaviour of Wish. We sat all of us with our eyes on Clayton—I, at least, with a sort of tight, stiff feeling about me as though from the back of my skull to the middle of my thighs my body had been changed to steel. And there, with a gravity that was imperturbably serene, Clayton bowed and swayed and waved his hands and arms before us. As he drew towards the end one piled up, one tingled in one's teeth. The last gesture, I have said, was to swing the arms out wide open, with the face held up. And when at last he swung out to this closing gesture I ceased even to breathe. It was ridiculous, of course, but you know that ghost-story feeling. It was after dinner, in a queer, old shadowy house. Would he, after all—— ?

There he stood for one stupendous moment, with his arms open and his upturned face, assured and bright, in the glare of the hanging lamp. We hung through that moment as if it were an age, and then came from all of us something that was half a sigh of infinite relief and half a reassuring "*No!*" For visibly—he wasn't going. It was all nonsense. He had told an idle story, and carried it almost to conviction, that was all! . . . And then in that moment the face of Clayton changed.

It changed. It changed as a lit house changes when its lights are suddenly extinguished. His eyes were suddenly eyes that were fixed, his smile was frozen on his lips, and he stood there still. He stood there, very gently swaying.

That moment, too, was an age. And then, you know, chairs were scraping, things were falling, and we were all moving. His knees seemed to give, and he fell forward, and Evans rose and caught him in his arms. . . .

It stunned us all. For a minute I suppose no one said a coherent thing. We believed it, yet could not believe it. . . . I came out of a muddled stupefaction to find myself kneeling beside him, and his vest and shirt were torn open, and Sanderson's hand lay on his heart. . . .

Well—the simple fact before us could very well wait our convenience ; there was no hurry for us to comprehend. It lay there for an hour ; it lies athwart my memory, black and amazing still, to this day. Clayton had, indeed, passed into the world that lies so near to and so far from our own, and he had gone thither by the only road that mortal man may take. But whether he did indeed pass there by that poor ghost's incantation, or whether he was stricken suddenly by apoplexy in the midst of an idle tale—as the coroner's jury would have us believe—is no matter for my judging ; it is just one of those inexplicable riddles that must remain unsolved until the final solution of all things shall come. All I certainly know is that, in the very moment, in the very instant, of concluding those passes, he changed, and staggered, and fell down before us—dead!

STORY TWO

THE NEW ACCELERATOR

CERTAINLY, if ever a man found a guinea when he was looking for a pin it is my good friend Professor Gibberne. I have heard before of investigators overshooting the mark, but never quite to the extent that he has done. He has really, this time at any rate, without any touch of exaggeration in the phrase, found something to revolutionise human life. And that when he was simply seeking an all-round nervous stimulant to bring languid people up to the stresses of these pushful days. I have tasted the stuff now several times, and I cannot do better than describe the effect the thing had on me. That there are astonishing experiences in store for all in search of new sensations will become apparent enough.

Professor Gibberne, as many people know, is my neighbour in Folkestone. Unless my memory plays me a trick, his portrait at various ages has already appeared in *The Strand Magazine*—I think late in 1899; but I am unable to look it up because I have lent that volume to some one who has never sent it back. The reader may, perhaps, recall the high forehead and the singularly long black eyebrows that give such a Mephistophelian touch to his face. He occupies one of those pleasant detached houses in the mixed style that make the western end of the Upper Sandgate Road so interesting. His is the one with the Flemish gables and the Moorish portico, and it is in the room with the mullioned bay window that he works when he is down here, and in which of an evening we have so often smoked and talked together. He is a mighty jester, but, besides, he likes to talk to me about his work; he is one of those men who find a help and stimulus in talking, and so I have been able to follow the conception of the New Accelerator right up from a very early stage. Of course, the greater portion of his experimental work is not done in Folkestone, but in Gower Street, in the fine new laboratory next to the hospital that he has been the first to use.

As every one knows, or at least as all intelligent people know, the special department in which Gibberne has gained so great and deserved a reputation among physiologists is the action of drugs upon the nervous system. Upon soporifics, sedatives, and anæsthetics he is, I am told, unequalled. He is also a chemist of considerable eminence, and I suppose in the subtle and complex jungle of riddles that centres about the ganglion cell and the axis fibre there are little cleared places of his making, glades of illumination, that, until he sees fit to publish his results, are inaccessible to every other living man. And in the last few years he has been particularly

assiduous upon this question of nervous stimulants, and already, before the discovery of the New Accelerator, very successful with them. Medical science has to thank him for at least three distinct and absolutely safe invigorators of unrivalled value to practising men. In cases of exhaustion the preparation known as Gibberne's B Syrup has, I suppose, saved more lives already than any lifeboat round the coast.

"But none of these things begin to satisfy me yet," he told me nearly a year ago. "Either they increase the central energy without affecting the nerves or they simply increase the available energy by lowering the nervous conductivity; and all of them are unequal and local in their operation. One wakes up the heart and viscera and leaves the brain stupefied, one gets at the brain champagne fashion and does nothing good for the solar plexus, and what I want—and what, if it's an earthly possibility, I mean to have—is a stimulant that stimulates all round, that wakes you up for a time from the crown of your head to the tip of your great toe, and makes you go two—or even three to everybody else's one. Eh? That's the thing I'm after."

"It would tire a man," I said.

"Not a doubt of it. And you'd eat double or treble—and all that. But just think what the thing would mean. Imagine yourself with a little phial like this"—he held up a bottle of green glass and marked his points with it—"and in this precious phial is the power to think twice as fast, move twice as quickly, do twice as much work in a given time as you could otherwise do."

"But is such a thing possible?"

"I believe so. If it isn't, I've wasted my time for a year. These various preparations of the hypophosphites, for example, seem to show that something of the sort. . . . Even if it was only one and a half times as fast it would do."

"It *would* do," I said.

"If you were a statesman in a corner, for example, time rushing up against you, something urgent to be done, eh?"

"He could dose his private secretary," I said.

"And gain—double time. And think if *you*, for example, wanted to finish a book."

"Usually," I said, "I wish I'd never begun 'em."

"Or a doctor, driven to death, wants to sit down and think out a case. Or a barrister—or a man cramming for an examination."

"Worth a guinea a drop," said I, "and more—to men like that."

"And in a duel again," said Gibberne, "where it all depends on your quickness in pulling the trigger."

"Or in fencing," I echoed.

"You see," said Gibberne, "if I get it as an all-round thing it will really do you no harm at all—except perhaps to

an infinitesimal degree it brings you nearer old age. You will just have lived twice to other people's once——"

"I suppose," I meditated, "in a duel—it would be fair?"

"That's a question for the seconds," said Gibberne.

I harked back further. "And you really think such a thing *is* possible?" I said.

"As possible," said Gibberne, and glanced at something that went throbbing by the window, "as a motor-bus. As a matter of fact——"

He paused and smiled at me deeply, and tapped slowly on the edge of his desk with the green phial. "I think I know the stuff. . . . Already I've got something coming." The nervous smile upon his face betrayed the gravity of his revelation. He rarely talked of his actual experimental work unless things were very near the end. "And it may be, it may be—I shouldn't be surprised—it may even do the thing at a greater rate than twice."

"It will be rather a big thing," I hazarded.

"It will be, I think, rather a big thing."

But I don't think he quite knew what a big thing it was to be, for all that.

I remember we had several subsequent talks about the stuff. "The New Accelerator" he called it, and his tone about it grew more confident on each occasion. Sometimes he talked nervously of unexpected physiological results its use might have, and then he would get a bit unhappy; at others he was frankly mercenary, and we debated long and anxiously how the preparation might be turned to commercial account. "It's a good thing," said Gibberne, "a tremendous thing. I know I'm giving the world something, and I think it only reasonable we should expect the world to pay. The dignity of science is all very well, but I think somehow I must have the monopoly of the stuff for, say, ten years. I don't see why *all* the fun in life should go to the dealers in ham."

My own interest in the coming drug certainly did not wane in the time. I have always had a queer twist towards metaphysics in my mind. I have always been given to paradoxes about space and time, and it seemed to me that Gibberne was really preparing no less than the absolute acceleration of life. Suppose a man repeatedly dosed with such a preparation: he would live an active and record life indeed, but he would be an adult at eleven, middle-aged at twenty-five, and by thirty well on the road to senilê decay. It seemed to me that so far Gibberne was only going to do for any one who took his drug exactly what Nature has done for the Jews and Orientals, who are men in their teens and aged by fifty, and quicker in thought and act than we are all the time. The marvel of drugs has always been great to my mind; you can madden a man, calm a man, make him incredibly strong and

alert or a helpless log, quicken this passion and allay that, all by means of drugs, and here was a new miracle to be added to this strange armoury of phials the doctors use! But Gibbern was far too eager upon his technical points to enter very keenly into my aspect of the question.

It was the 7th or 8th of August when he told me the distillation that would decide his failure or success for a time was going forward as we talked, and it was on the 10th that he told me the thing was done and the New Accelerator a tangible reality in the world. I met him as I was going up the Sandgate Hill towards Folkestone—I think I was going to get my hair cut; and he came hurrying down to meet me—I suppose he was coming to my house to tell me at once of his success. I remember that his eyes were unusually bright and his face flushed, and I noted even then the swift alacrity of his step.

"It's done," he cried, and gripped my hand, speaking very fast; "it's more than done. Come up to my house and see."

"Really?"

"Really!" he shouted. "Incredibly! Come up and see."

"And it does—twice?"

"It does more, much more. It scares me. Come up and see the stuff. Taste it! Try it! It's the most amazing stuff on earth. He gripped my arm and, walking at such a pace that he forced me into a trot, went shouting with me up the hill. A whole charabancful of people turned and stared at us in unison after the manner of people in charabancs. It was one of those hot, clear days that Folkestone sees so much of, every colour incredibly bright and every outline hard. There was a breeze, of course, but not so much breeze as sufficed under these conditions to keep me cool and dry. I panted for mercy.

"I'm not walking fast, am I?" cried Gibberne, and slacked his pace to a quick march.

"You've been taking some of this stuff," I puffed.

"No," he said. "At the utmost a drop of water that stood in a beaker from which I had washed out the last traces of the stuff. I took some last night, you know. But that is ancient history, now."

"And it goes twice?" I said, nearing his doorway in a grateful perspiration.

"It goes a thousand times, many thousand times!" cried Gibberne, with a dramatic gesture, flinging open his Early English carved oak gate.

"Phew!" said I, and followed him to the door.

"I don't know how many times it goes," he said, with his latch-key in his hand.

"And you——"

"It throws all sorts of light on nervous physiology, it kicks

the theory of vision into a perfectly new shape! . . . Heaven knows how many thousand times. We'll try all that after—— The thing is to try the stuff now."

"Try the stuff?" I said, as we went along the passage.

"Rather," said Gibberne, turning on me in his study. "There it is in that little green phial there! Unless you happen to be afraid?"

I am a careful man by nature, and only theoretically adventurous. I *was* afraid. But on the other hand there is pride.

"Well," I haggled. "You say you've tried it?"

"I've tried it," he said, "and I don't look hurt by it, do I? I don't even look livery and I *feel*——"

I sat down. "Give me the potion," I said. "If the worst comes to the worst it will save having my hair cut, and that I think is one of the most hateful duties of a civilised man. How do you take the mixture?"

"With water," said Gibberne, whacking down a carafe.

He stood up in front of his desk and regarded me in his easy chair; his manner was suddenly affected by a touch of the Harley Street specialist. "It's rum stuff, you know," he said.

I made a gesture with my hand.

"I must warn you in the first place as soon as you've got it down to shut your eyes, and open them very cautiously in a minute or so's time. One still sees. The sense of vision is a question of length of vibration, and not of multitude of impacts; but there's a kind of shock to the retina, a nasty giddy confusion just at the time if the eyes are open. Keep 'em shut."

"Shut," I said. "Good!"

"And the next thing is, keep still. Don't begin to whack about. You may fetch something a nasty rap if you do. Remember you will be going several thousand times faster than you ever did before, heart, lungs, muscles, brain—everything—and you will hit hard without knowing it. You won't know it, you know. You'll feel just as you do now. Only everything in the world will seem to be going ever so many thousand times slower than it ever went before. That's what makes it so deuced queer."

"Lor'," I said. "And you mean——"

"You'll see," said he, and took up a measure. He glanced at the material on his desk. "Glasses," he said, "water. All here. Mustn't take too much for the first attempt."

The little phial glucked out its precious contents. "Don't forget what I told you," he said, turning the contents of the measure into a glass in the manner of an Italian waiter measuring whisky. "Sit with the eyes tightly shut and in absolute stillness for two minutes," he said. "Then you will hear me speak."

He added an inch or so of water to the dose in each glass.

"By the bye," he said, "don't put your glass down. Keep it in your hand and rest your hand on your knee. Yes—so. And now——"

He raised his glass.

"The New Accelerator," I said.

"The New Accelerator," he answered, and we touched glasses and drank, and instantly I closed my eyes.

You know that blank non-existence into which one drops when one has taken "gas." For an indefinite interval it was like that. Then I heard Gibberne telling me to wake up, and I stirred and opened my eyes. There he stood as he had been standing, glass still in hand. It was empty, that was all the difference.

"Well?" said I.

"Nothing out of the way?"

"Nothing. A slight feeling of exhilaration, perhaps. Nothing more."

"Sounds?"

"Things are still," I said. "By Jove! yes! They *are* still. Except the sort of faint pat, patter, like rain falling on different things. What is it?"

"Analysed sounds," I think he said, but I am not sure. He glanced at the window. "Have you ever seen a curtain before a window fixed in that way before?"

I followed his eyes, and there was the end of the curtain, frozen, as it were, corner high, in the act of flapping briskly in the breeze.

"No," said I; "that's odd."

"And here," he said, and opened the hand that held the glass. Naturally I winced, expecting the glass to smash. But so far from smashing it did not even seem to stir; it hung in mid-air—motionless. "Roughly speaking," said Gibberne, "an object in these latitudes falls 16 feet in the first second. This glass is falling 16 feet in a second now. Only, you see, it hasn't been falling yet for the hundredth part of a second. That gives you some idea of the pace of my Accelerator." And he waved his hand round and round, over and under the slowly sinking glass. Finally he took it by the bottom, pulled it down and placed it very carefully on the table. "Eh?" he said to me, and laughed.

"That seems all right," I said, and began very gingerly to raise myself from my chair. I felt perfectly well, very light and comfortable, and quite confident in my mind. I was going fast all over. My heart, for example, was beating a thousand times a second, but that caused me no discomfort at all. I looked out of the window. An immovable cyclist, head down and with a frozen puff of dust behind his driving-wheel, scorched to overtake a galloping charabanc that did not stir. I gaped in amazement at this incredible spectacle.

"Gibberne," I cried, "how long will this confounded stuff last?"

"Heaven knows!" he answered. "Last time I took it I went to bed and slept it off. I tell you, I was frightened. It must have lasted some minutes, I think—it seemed like hours. But after a bit it slows down rather suddenly, I believe."

I was proud to observe that I did not feel frightened—I suppose because there were two of us. "Why shouldn't we go out?" I asked.

"Why not?"

"They'll see us."

"Not they. Goodness, no! Why, we shall be going a thousand times faster than the quickest conjuring trick that was ever done. Come along! Which way shall we go? Window, or door?"

And out by the window we went.

Assuredly of all the strange experiences that I have ever had, or imagined, or read of other people having or imagining, that little raid I made with Gibberne on the Folkestone Leas, under the influence of the New Accelerator, was the strangest and maddest of all. We went out by his gate into the road, and there we made a minute examination of the statuesque passing traffic. The tops of the wheels and some of the legs of the horses of this charabanc, the end of the whip-lash and the lower jaw of the conductor—who was just beginning to yawn—were perceptibly in motion, but all the rest of the lumbering conveyance seemed still. And quite noiseless except for a faint rattling that came from one man's throat! And as parts of this frozen edifice there were a driver, you know, and a conductor, and eleven people! The effect as we walked about the thing began by being madly queer and ended by being—disagreeable. There they were, people like ourselves and yet not like ourselves, frozen in careless attitudes, caught in mid-gesture. A girl and a man smiled at one another, a leering smile that threatened to last for evermore; a woman in a floppy capelline rested her arm on the rail and stared at Gibberne's house with the unwinking stare of eternity; a man stroked his moustache like a figure of wax, and another stretched a tiresome stiff hand with extended fingers towards his loosened hat. We stared at them, we laughed at them, we made faces at them, and then a sort of disgust of them came upon us, and we turned away and walked round in front of the cyclist towards the Leas.

"Goodness!" cried Gibberne suddenly; "look there!"

He pointed, and there at the tip of his finger and sliding down the air with wings flapping slowly and at the speed of an exceptionally languid snail—was a bee.

And so we came out upon the Leas. There the thing seemed madder than ever. The band was playing in the upper

stand, though all the sound it made for us was a low-pitched, wheezy rattle, a sort of prolonged last sigh that passed at times into a sound like the slow, muffled ticking of some monstrous clock. Frozen people stood erect ; strange, silent, self-conscious-looking dummies hung unstably in mid-stride, promenading upon the grass. I passed close to a poodle dog suspended in the act of leaping, and watched the slow movement of his legs as he sank to earth. "Lord, look *here* ! " cried Gibberne, and we halted for a moment before a magnificent person in white faint-striped flannels, white shoes, and a Panama hat, who turned back to wink at two gaily dressed ladies he had passed. A wink, studied with such leisurely deliberation as we could afford, is an unattractive thing. It loses any quality of alert gaiety, and one remarks that the winking eye does not completely close, that under its drooping lid appears the lower edge of an eyeball and a line of white. "Heaven give me memory," said I, "and I will never wink again."

"Or smile," said Gibberne, with his eye on the lady's answering teeth.

"It's infernally hot, somehow," said I. "Let's go slower."

"Oh, come along ! " said Gibberne.

We picked our way among the bath-chairs in the path. Many of the people sitting in the chairs seemed almost natural in their passive poses, but the contorted scarlet of the bandsmen was not a restful thing to see. A purple-faced gentleman was frozen in the midst of a violent struggle to refold his newspaper against the wind ; there were many evidences that all these people in their sluggish way were exposed to a considerable breeze, a breeze that had no existence so far as our sensations went. We came out and walked a little way from the crowd, and turned and regarded it. To see all that multitude changed to a picture, smitten rigid, as it were, into the semblance of realistic wax, was impossibly wonderful. It was absurd, of course ; but it filled me with an irrational, an exultant sense of superior advantage. Consider the wonder of it ! All that I had said and thought and done since the stuff had begun to work in my veins had happened, so far as those people, so far as the world in general went, in the twinkling of an eye. "The New Accelerator——" I began, but Gibberne interrupted me.

"There's that infernal old woman ! " he said.

"What old woman ? "

"Lives next door to me," said Gibberne. "Has a lapdog that yaps. Gods ! The temptation is strong ! "

There is something very boyish and impulsive about Gibberne at times. Before I could expostulate with him he had dashed forward, snatched the unfortunate animal out of visible existence, and was running violently with it towards the cliff of the Leas. It was most extraordinary. The little

brute, you know, didn't bark or wriggle or make the slightest sign of vitality. It kept quite stiffly in an attitude of somnolent repose, and Gibberne held it by the neck. It was like running about with a dog of wood. "Gibberne," I cried, "put it down!" Then I said something else. "If you run like that, Gibberne," I cried, "you'll set your clothes on fire. Your linen trousers are going brown as it is!"

He clapped his hand on his thigh and stood hesitating on the verge. "Gibberne," I cried, coming up, "put it down. This heat is too much! It's our running so! Two or three miles a second! Friction of the air!"

"What?" he said, glancing at the dog.

"Friction of the air," I shouted. "Friction of the air. Going too fast. Like meteorites and things. Too hot. And, Gibberne! Gibberne! I'm all over pricking and a sort of perspiration. You can see people stirring slightly. I believe the stuff's working off! Put that dog down."

"Eh?" he said.

"It's working off," I repeated. "We're too hot and the stuff's working off! I'm wet through."

He stared at me. Then at the band, the wheezy rattle of whose performance was certainly going faster. Then with a tremendous sweep of the arm he hurled the dog away from him and it went spinning upward, still inanimate and hung at last over the grouped parasols of a knot of chattering people. Gibberne was gripping my elbow. "By Jove!" he cried. "I believe it is! A sort of hot pricking and—yes. That man's moving his pocket-handkerchief! Perceptibly. We must get out of this sharp."

But we could not get out of it sharply enough. Luckily perhaps! For we might have run, and if we had run we should, I believe, have burst into flames. Almost certainly we should have burst into flames! You know we had neither of us thought of that. . . . But before we could even begin to run the action of the drug had ceased. It was the business of a minute fraction of a second. The effect of the New Accelerator passed like the drawing of a curtain, vanished in the movement of a hand. I heard Gibberne's voice in infinite alarm. "Sit down," he said, and flop, down upon the turf at the edge of the Leas I sat—scorching as I sat. There is a patch of burnt grass there still where I sat down. The whole stagnation seemed to wake up as I did so, the disarticulated vibration of the band rushed together into a blast of music, the promenaders put their feet down and walked their ways, the papers and flags began flapping, smiles passed into words, the winker finished his wink and went on his way complacently, and all the seated people moved and spoke.

The whole world had come alive again, was going as fast as we were, or rather we were going no faster than the rest of the world. It was like slowing down as one comes into a railway

station. Everything seemed to spin round for a second or two, I had the most transient feeling of nausea, and that was all. And the little dog which had seemed to hang for a moment when the force of Gibberne's arm was expended fell with a swift acceleration clean through a lady's parasol!

That was the saving of us. Unless it was for one corpulent old gentleman in a bath-chair, who certainly did start at the sight of us and afterwards regarded us at intervals with a darkly suspicious eye, and finally, I believe, said something to his nurse about us, I doubt if a solitary person remarked our sudden appearance among them. Plop! We must have appeared abruptly. We ceased to smoulder almost at once, though the turf beneath me was uncomfortably hot. The attention of every one—including even the Amusements' Association band, which on this occasion, for the only time in its history, got out of tune—was arrested by the amazing fact, and the still more amazing yapping and uproar caused by the fact, that a respectable, over-fed lapdog sleeping quietly to the east of the bandstand should suddenly fall through the parasol of a lady on the west—in a slightly singed condition due to the extreme velocity of its movements through the air. In these absurd days, too, when we are all trying to be as psychic and silly and superstitious as possible! People got up and trod on other people, chairs were overturned, the Leas policeman ran. How the matter settled itself I do not know—we were much too anxious to disentangle ourselves from the affair and get out of range of the eye of the old gentleman in the bath-chair to make minute inquiries. As soon as we were sufficiently cool and sufficiently recovered from our giddiness and nausea and confusion of mind to do so we stood up and, skirting the crowd, directed our steps back along the road below the Metropole towards Gibberne's house. But amidst the din I heard very distinctly the gentleman who had been sitting beside the lady of the ruptured sunshade using quite unjustifiable threats and language to one of those chair-attendants who have "Inspector" written on their caps. "If you didn't throw the dog," he said, "who *did?*"

The sudden return of movement and familiar noises, and our natural anxiety about ourselves (our clothes were still dreadfully hot, and the fronts of the thighs of Gibberne's white trousers were scorched a drabbish brown), prevented the minute observations I should have liked to make on all these things. Indeed, I really made no observations of any scientific value on that return. The bee, of course, had gone. I looked for that cyclist, but he was already out of sight as we came into the Upper Sandgate Road or hidden from us by traffic; the charabanc, however, with its people now all alive and stirring, was clattering along at a spanking pace almost abreast of the nearer church.

We noted, however, that the window-sill on which we had stepped in getting out of the house was slightly singed, and that the impressions of our feet on the gravel of the path were unusually deep.

So it was I had my first experience of the New Accelerator. Practically we had been running about and saying and doing all sorts of things in the space of a second or so of time. We had lived half an hour while the band had played, perhaps, two bars. But the effect it had upon us was that the whole world had stopped for our convenient inspection. Considering all things, and particularly considering our rashness in venturing out of the house, the experience might certainly have been much more disagreeable than it was. It showed, no doubt, that Gibberne has still much to learn before his preparation is a manageable convenience, but its practicability it certainly demonstrated beyond all cavil.

Since that adventure he has been steadily bringing its use under control, and I have several times, and without the slightest bad result, taken measured doses under his direction; though I must confess I have not yet ventured abroad again while under its influence. I may mention, for example, that this story has been written at one sitting and without interruption, except for the nibbling of some chocolate, by its means. I began at 6.25, and my watch is now very nearly at the minute past the half-hour. The convenience of securing a long, uninterrupted spell of work in the midst of a day full of engagements cannot be exaggerated. Gibberne is now working at the quantitative handling of his preparation, with especial reference to its distinctive effects upon different types of constitution. He then hopes to find a Retarder with which to dilute its present rather excessive potency. The Retarder will, of course, have the reverse effect to the Accelerator; used alone it should enable the patient to spread a few seconds over many hours of ordinary time, and so to maintain an apathetic inaction, a glacierlike absence of alacrity, amidst the most animated or irritating surroundings. The two things together must necessarily work an entire revolution in civilised existence. It is the beginning of our escape from that Time Garment of which Carlyle speaks. While this Accelerator will enable us to concentrate ourselves with tremendous impact upon any moment or occasion that demands our utmost sense and vigour, the Retarder will enable us to pass in passive tranquillity through infinite hardship and tedium. Perhaps I am a little optimistic about the Retarder, which has indeed still to be discovered, but about the Accelerator there is no possible sort of doubt whatever. Its appearance upon the market in a convenient, controllable, and assimilable form is a matter of the next few months. It will be obtainable of all chemists and druggists, in

small green bottles, at a high but, considering its extraordinary qualities, by no means excessive price. Gibberne's Nervous Accelerator it will be called, and he hopes to be able to supply it in three strengths: one in 200, one in 900, and one in 2000, distinguished by yellow, pink, and white labels respectively.

No doubt its use renders a great number of very extraordinary things possible; for, of course, the most remarkable and, possibly, even criminal proceedings may be effected with impunity by thus dodging, as it were, into the interstices of time. Like all potent preparations it will be liable to abuse. We have, however, discussed this aspect of the question very thoroughly, and we have decided that this is purely a matter of medical jurisprudence and altogether outside our province. We shall manufacture and sell the Accelerator, and, as for the consequences—we shall see.

STORY THREE

MR. LEDBETTER'S VACATION

My friend, Mr. Ledbetter, is a round-faced little man, whose natural mildness of eye is gigantically exaggerated when you catch the beam through his glasses, and whose deep, deliberate voice irritates irritable people. A certain elaborate clearness of enunciation has come with him to his present vicarage from his scholastic days, an elaborate clearness of enunciation and a certain nervous determination to be firm and correct upon all issues, important and unimportant alike. He is a sacerdotalist and a chess player, and suspected by many of the secret practice of the higher mathematics—creditable rather than interesting things. His conversation is copious and given much to needless detail. By many, indeed, his intercourse is condemned, to put it plainly, as "boring," and such have even done me the compliment to wonder why I countenance him. But, on the other hand, there is a large faction who marvel at his countenancing such a dishevelled, discreditable acquaintance as myself. Few appear to regard our friendship with equanimity. But that is because they do not know of the link that binds us, of my amiable connection *via* Jamaica with Mr. Ledbetter's past.

About that past he displays an anxious modesty. "I do not know *what* I should do if it became known," he says; and repeats, impressively, "I do not know *what* I should do." As a matter of fact, I doubt if he would do anything except get very red about the ears. But that will appear later; nor will I tell here of our first encounter, since, as a general rule—though I am prone to break it—the end of a story should come after, rather than before, the beginning. And the beginning of the story goes a long way back; indeed, it is now nearly twenty years since Fate, by a series of complicated and startling manœuvres, brought Mr. Ledbetter, so to speak, into my hands.

In those days I was living in Jamaica, and Mr. Ledbetter was a schoolmaster in England. He was in orders, and already recognisably the same man that he is to-day: the same rotundity of visage, the same or similar glasses, and the same faint shadow of surprise in his resting expression. He was, of course, dishevelled when I saw him, and his collar less of a collar than a wet bandage, and that may have helped to bridge the natural gulf between us—but of that, as I say, later.

The business began at Hithergate-on-Sea, and simultaneously with Mr. Ledbetter's summer vacation. Thither he came for a greatly needed rest, with a bright brown portmanteau

marked "F. W. L.," a new white and black straw hat, and two pairs of white flannel trousers. He was naturally exhilarated at his release from school—for he was not very fond of the boys he taught. After dinner he fell into a discussion with a talkative person established in the boarding-house to which, acting on the advice of his aunt, he had resorted. This talkative person was the only other man in the house. Their discussion concerned the melancholy disappearance of wonder and adventure in these latter days, this prevalence of globe-trotting, the abolition of distance by steam and electricity, the vulgarity of advertisement, the degradation of men by civilisation, and many such things. Particularly was the talkative person eloquent on the decay of human courage through security, a security Mr. Ledbetter rather thoughtlessly joined him in deploring. Mr. Ledbetter, in the first delight of emancipation from "duty," and being anxious, perhaps, to establish a reputation for manly conviviality, partook, rather more freely than was advisable, of the excellent whisky the talkative person produced. But he did not become intoxicated, he insists.

He was simply eloquent beyond his sober wont, and with the finer edge gone from his judgment. And after that long talk of the brave old days that were past for ever, he went out into moonlit Hithergate alone and up the cliff road where the villas cluster together.

He had bewailed, and now as he walked up the silent road he still bewailed, the fate that had called him to such an uneventful life as a pedagogue's. What a prosaic existence he led, so stagnant, so colourless! Secure, methodical, year in year out, what call was there for bravery? He thought enviously of those roving, mediæval days, so near and so remote, of quests and spies and condottieri and many a risky blade-drawing business. And suddenly came a doubt, a strange doubt, springing out of some chance thought of tortures, and destructive altogether of the position he had assumed that evening.

Was he—Mr. Ledbetter—really, after all, so brave as he assumed? Would he really be so pleased to have railways, policemen, and security vanish suddenly from the earth?

The talkative man had spoken enviously of crime. "The burglar," he said, "is the only true adventurer left on earth. Think of his singlehanded fight—against the whole civilised world!" And Mr. Ledbetter had echoed his envy. "They *do* have some fun out of life," Mr. Ledbetter had said. "And about the only people who do. Just think how it must feel to wire a lawn!" And he had laughed wickedly. Now, in this franker intimacy of self-communion he found himself instituting a comparison between his own brand of courage and that of the habitual criminal. He tried to meet these insidious questionings with blank assertion. "I could do all

that," said Mr. Ledbetter. "I long to do all that. Only I do not give way to my criminal impulses. My moral courage restrains me." But he doubted, even while he told himself these things.

Mr. Ledbetter passed a large villa standing by itself. Conveniently situated above a quiet, practicable balcony was a window, gaping black, wide open. At the time he scarcely marked it, but the picture of it came with him, wove into his thoughts. He figured himself climbing up that balcony, crouching—plunging into that dark, mysterious interior. "Bah! You would not dare," said the Spirit of Doubt. "My duty to my fellow-men forbids," said Mr. Ledbetter's self-respect.

It was nearly eleven, and the little seaside town was already very still. The whole world slumbered under the moonlight. Only one warm oblong of window-blind far down the road spoke of waking life. He turned and came back slowly towards the villa of the open window. He stood for a time outside the gate, a battlefield of motives. "Let us put things to the test," said Doubt. "For the satisfaction of these intolerable doubts, show that you dare go into that house. Commit a burglary in blank. That, at any rate, is no crime." Very softly he opened and shut the gate and slipped into the shadow of the shrubbery. "This is foolish," said Mr. Ledbetter's caution. "I expected that," said Doubt. His heart was beating fast, but he was certainly not afraid. He was *not* afraid. He remained in that shadow for some considerable time.

The ascent of the balcony, it was evident, would have to be done in a rush, for it was all in clear moonlight, and visible from the gate into the avenue. A trellis thinly set with young, ambitious climbing roses made the ascent ridiculously easy. There, in that black shadow by the stone vase of flowers, one might crouch and take a closer view of this gaping breach in the domestic defences, the open window. For a while Mr. Ledbetter was as still as the night, and then that insidious whisky tipped the balance. He dashed forward. He went up the trellis with quick, convulsive movements, swung his legs over the parapet of the balcony, and dropped panting in the shadow even as he had designed. He was trembling violently, short of breath, and his heart pumped noisily, but his mood was exultation. He could have shouted to find he was so little afraid.

A happy line that he had learnt from Wills's "Mephistopheles" came into his mind as he crouched there. "I feel like a cat on the tiles," he whispered to himself. It was far better than he had expected—this adventurous exhilaration. He was sorry for all poor men to whom burglary was unknown. Nothing happened. He was quite safe. And he was acting in the bravest manner!

And now for the window, to make the burglary complete!

Must he dare do that? Its position above the front door defined it as a landing or passage, and there were no looking-glasses or any bedroom signs about it, or any other window on the first floor, to suggest the possibility of a sleeper within. For a time he listened under the ledge, then raised his eyes above the sill and peered in. Close at hand, on a pedestal, and a little startling at first, was a nearly life-size gesticulating bronze. He ducked, and after some time he peered again. Beyond was a broad landing, faintly gleaming; a flimsy fabric of bead curtain, very black and sharp, against a further window, a broad staircase, plunging into a gulf of darkness below; and another ascending to the second floor. He glanced behind him, but the stillness of the night was unbroken. "Crime," he whispered, "crime," and scrambled softly and swiftly over the sill into the house. His feet fell noiselessly on a mat of skin. He was a burglar indeed!

He crouched for a time, all ears and peering eyes. Outside was a scampering and rustling, and for a moment he repented of his enterprise. A short "miaow," a spitting, and a rush into silence, spoke reassuringly of cats. His courage grew. He stood up. Every one was abed, it seemed. So easy is it to commit a burglary, if one is so minded. He was glad he had put it to the test. He determined to take some petty trophy, just to prove his freedom from any abject fear of the law, and depart the way he had come.

He peered about him, and suddenly the critical spirit arose again. Burglars did far more than such mere elementary entrance as this: they went into rooms, they forced safes. Well—he was not afraid. He could not force safes, because that would be a stupid want of consideration for his hosts. But he would go into rooms—he would go upstairs. More: he told himself that he was perfectly secure; an empty house could not be more reassuringly still. He had to clench his hands, nevertheless, and summon all his resolution before he began very softly to ascend the dim staircase, pausing for several seconds between each step. Above was a square landing with one open and several closed doors; and all the house was still. For a moment he stood wondering what would happen if some sleeper woke suddenly and emerged. The open door showed a moonlit bedroom, the coverlet white and undisturbed. Into this room he crept in three interminable minutes and took a piece of soap for his plunder—his trophy. He turned to descend even more softly than he had ascended. It was as easy as—— Hist! . . .

Footsteps! On the gravel outside the house—and then the noise of a latchkey, the yawn and bang of a door, and the spitting of a match in the hall below. Mr. Ledbetter stood petrified by the sudden discovery of the folly upon which he had come. "How on earth am I to get out of this?" said Mr. Ledbetter.

The hall grew bright with a candle flame, some heavy object bumped against the umbrella-stand, and feet were ascending the staircase. In a flash Mr. Ledbetter realised that his retreat was closed. He stood for a moment, a pitiful figure of penitent confusion. "My goodness! What a *fool* I have been!" he whispered, and then darted swiftly across the shadowy landing into the empty bedroom from which he had just come. He stood listening—quivering. The footsteps reached the first-floor landing.

Horrible thought! This was possibly the late-comer's room! Not a moment was to be lost! Mr. Ledbetter stooped beside the bed, thanked Heaven for a valance, and crawled within its protection not ten seconds too soon. He became motionless on hands and knees. The advancing candle-light appeared through the thinner stitches of the fabric, the shadows ran wildly about, and became rigid as the candle was put down.

"Lord, what a day!" said the newcomer, blowing noisily, and it seemed he deposited some heavy burthen on what Mr. Ledbetter, judging by the feet, decided to be a writing-table. The unseen then went to the door and locked it, examined the fastenings of the windows carefully and pulled down the blinds, and returning sat down upon the bed with startling ponderosity.

"*What* a day!" he said. "Good Lord!" and blew again, and Mr. Ledbetter inclined to believe that the person was mopping his face. His boots were good stout boots; the shadows of his legs upon the valance suggested a formidable stoutness of aspect. After a time he removed some upper garments—a coat and waistcoat, Mr. Ledbetter inferred—and casting them over the rail of the bed remained breathing less noisily, and as it seemed cooling from a considerable temperature. At intervals he muttered to himself, and once he laughed softly. And Mr. Ledbetter muttered to himself, but he did not laugh. "Of all the foolish things," said Mr. Ledbetter. "What on earth am I to do now?"

His outlook was necessarily limited. The minute apertures between the stitches of the fabric of the valance admitted a certain amount of light, but permitted no peeping. The shadows upon this curtain, save for those sharply defined legs, were enigmatical, and intermingled confusingly with the florid patterning of the chintz. Beneath the edge of the valance a strip of carpet was visible, and, by cautiously depressing his eye, Mr. Ledbetter found that this strip broadened until the whole area of the floor came into view. The carpet was a luxurious one, the room spacious, and, to judge by the castors and so forth of the furniture, well equipped.

What he should do he found it difficult to imagine. To wait until this person had gone to bed, and then, when he seemed to be sleeping, to creep to the door, unlock it, and

bolt headlong for that balcony seemed the only possible thing to do. Would it be possible to jump from the balcony? The danger of it! When he thought of the chances against him, Mr. Ledbetter despaired. He was within an ace of thrusting forth his head beside the gentleman's legs, coughing if necessary to attract his attention, and then, smiling, apologising, and explaining his unfortunate intrusion by a few well-chosen sentences. But he found these sentences hard to choose. "No doubt, sir, my appearance is peculiar," or, "I trust, sir, you will pardon my somewhat ambiguous appearance from beneath you," was about as much as he could get.

Grave possibilities forced themselves on his attention. Suppose they did not believe him, what would they do to him? Would his unblemished high character count for nothing? Technically he was a burglar, beyond dispute. Following out this train of thought, he was composing a lucid apology for "this technical crime I have committed," to be delivered before sentence in the dock, when the stout gentleman got up and began walking about the room. He locked and unlocked drawers, and Mr. Ledbetter had a transient hope that he might be undressing. But, no! He seated himself at the writing-table, and began to write and then tear up documents. Presently the smell of burning cream-laid paper mingled with the odour of cigars in Mr. Ledbetter's nostrils.

"The position I had assumed," said Mr. Ledbetter when he told me of these things, "was in many respects an ill-advised one. A transverse bar beneath the bed depressed my head unduly, and threw a disproportionate share of my weight upon my hands. After a time, I experienced what is called, I believe, a crick in the neck. The pressure of my hands on the coarsely-stitched carpet speedily became painful. My knees, too, were painful, my trousers being drawn tightly over them. At that time I wore rather higher collars than I do now—two and a half inches, in fact—and I discovered what I had not remarked before, that the edge of the one I wore was frayed slightly under the chin. But much worse than these things was an itching of my face, which I could only relieve by violent grimacing—I tried to raise my hand, but the rustle of the sleeve alarmed me. After a time I had to desist from this relief also, because—happily in time—I discovered that my facial contortions were shifting my glasses down my nose. Their fall would, of course, have exposed me, and as it was they came to rest in an oblique position of by no means stable equilibrium. In addition I had a slight cold, and an intermittent desire to sneeze or sniff caused me inconvenience. In fact, quite apart from the extreme anxiety of my position, my physical discomfort became in a short time very considerable indeed. But I had to stay there motionless, nevertheless."

After an interminable time, there began a chinking sound. This deepened into a rhythm: chink, chink, chink—twenty-five chinks—a rap on the writing-table, and a grunt from the owner of the stout legs. It dawned upon Mr. Ledbetter that this chinking was the chinking of gold. He became incredulously curious as it went on. His curiosity grew. Already, if that was the case, this extraordinary man must have counted some hundreds of pounds. At last Mr. Ledbetter could resist it no longer, and he began very cautiously to fold his arms and lower his lead to the level of the floor, in the hope of peeping under the valance. He moved his feet, and one made a slight scraping on the floor. Suddenly the chinking ceased. Mr. Ledbetter became rigid. After a while the chinking was resumed. Then it ceased again, and everything was still, except Mr. Ledbetter's heart—that organ seemed to him to be beating like a drum.

The stillness continued. Mr. Ledbetter's head was now on the floor, and he could see the stout legs as far as the shins. They were quite still. The feet were resting on the toes and drawn back, as it seemed, under the chair of the owner. Everything was quite still, everything continued still. A wild hope came to Mr. Ledbetter that the unknown was in a fit or suddenly dead, with his head upon the writing-table. . . .

The stillness continued. What had happened? The desire to peep became irresistible. Very cautiously Mr. Ledbetter shifted his hand forward, projected a pioneer finger, and began to lift the valance immediately next his eye. Nothing broke the stillness. He saw now the stranger's knees, saw the back of the writing-table, and then—he was staring at the barrel of a heavy revolver pointed over the writing-table at his head.

"Come out of that, you scoundrel!" said the voice of the stout gentleman in a tone of quiet concentration. "Come out. This side, and now. None of your hanky-panky—come right out now."

Mr. Ledbetter came right out, a little reluctantly perhaps, but without any hanky-panky, and at once, even as he was told.

"Kneel," said the stout gentleman. "And hold up your hands."

The valance dropped again behind Mr. Ledbetter, and he rose from all fours and held up his hands. "Dressed like a parson," said the stout gentleman. "I'm blest if he isn't! A little chap, too! You *scoundrel*! What the deuce possessed you to come here to-night? What the deuce possessed you to get under my bed?"

He did not appear to require an answer, but proceeded at once to several very objectionable remarks upon Mr. Ledbetter's personal appearance. He was not a very big man, but he looked strong to Mr. Ledbetter: he was as stout as

his legs had promised, he had rather delicately-chiselled small features distributed over a considerable area of whitish face, and quite a number of chins. And the note of his voice had a sort of whispering undertone.

"What the deuce, I say, possessed you to get under my bed?"

Mr. Ledbetter, by an effort, smiled a wan, propitiatory smile. He coughed. "I can quite understand——" he said.

"Why! What on earth . . . ? It's *soap*! No!—you scoundrel. Don't you move that hand."

"It's soap," said Mr. Ledbetter. "From your washstand. No doubt if——"

"Don't talk," said the stout man. "I see it's soap. Of all incredible things."

"If I might explain——"

"Don't explain. It's sure to be a lie, and there's no time for explanations. What was I going to ask you? Ah! Have you any mates?"

"In a few minutes, if you——"

"Have you any mates? Curse you. If you start any soapy palaver I'll shoot. Have you any mates?"

"No," said Mr. Ledbetter.

"I suppose it's a lie," said the stout man. "But you'll pay for it if it is. Why the deuce didn't you floor me when I came upstairs? You won't get a chance to now, anyhow. Fancy getting under the bed! I reckon it's a fair cop, anyhow, so far as you are concerned."

"I don't see how I could prove an *alibi*," remarked Mr. Ledbetter, trying to show by his conversation that he was an educated man. There was a pause. Mr. Ledbetter perceived that on a chair beside his captor was a large black bag on a heap of crumpled papers, and that there were torn and burnt papers on the table. And in front of these, and arranged methodically along the edge, were rows and rows of little yellow rouleaux—a hundred times more gold than Mr. Ledbetter had seen in all his life before. The light of two candles, in silver candlesticks, fell upon these. The pause continued. "It is rather fatiguing holding up my hands like this," said Mr. Ledbetter, with a deprecatory smile.

"That's all right," said the fat man. "But what to do with you I don't exactly know."

"I know my position is ambiguous."

"Lord!" said the fat man, "ambiguous! And goes about with his own soap, and wears a thundering great clerical collar! You *are* a blooming burglar, you are—if ever there was one!"

"To be strictly accurate," said Mr. Ledbetter, and suddenly his glasses slipped off and clattered against his vest buttons.

The fat man changed countenance, a flash of savage resolution crossed his face, and something in the revolver clicked.

He put his other hand to the weapon. And then he looked at Mr. Ledbetter, and his eye went down to the dropped pince-nez.

"Full-cock now, anyhow," said the fat man, after a pause, and his breath seemed to catch. "But I'll tell you, you've never been so near death before. Lord! *I'm* almost glad. If it hadn't been that the revolver wasn't cocked, you'd be lying dead there now."

Mr. Ledbetter said nothing, but he felt that the room was swaying.

"A miss is as good as a mile. It's lucky for both of us it wasn't. Lord!" He blew noisily. "There's no need for you to go pale-green for a little thing like that."

"I can assure you, sir——" said Mr. Ledbetter, with an effort.

"There's only one thing to do. If I call in the police, I'm bust—a little game I've got on is bust. That won't do. If I tie you up and leave you—again, the thing may be out to-morrow. To-morrow's Sunday, and Monday's Bank Holiday—I've counted on three clear days. Shooting you's murder—and hanging; and besides, it will bust the whole blooming kernooze. I'm hanged if I can think what to do—I'm hanged if I can."

"Will you permit me——"

"You gas as much as if you were a real parson, I'm blessed if you don't. Of all the burglars you are the—— Well! No—I *won't* permit you. There isn't time. If you start off jawing again, I'll shoot right in your stomach. See? But I know now—I know now! What we're going to do first, my man, is an examination for concealed arms—an examination for concealed arms. And look here! When I tell you to do a thing, don't start off at a gabble—do it brisk."

And with many elaborate precautions, and always pointing the pistol at Mr. Ledbetter's head, the stout man stood him up and searched him for weapons. "Why, you *are* a burglar!" he said. "You're a perfect amateur. You haven't even a pistol-pocket in the back of your breeches. No, you don't! Shut up, now."

So soon as the issue was decided, the stout man made Mr. Ledbetter take off his coat and roll up his shirt-sleeves, and, with the revolver at one ear, proceed with the packing his appearance had interrupted. From the stout man's point of view that was evidently the only possible arrangement, for if he had packed, he would have had to put down the revolver. So that even the gold on the table was handled by Mr. Ledbetter. This nocturnal packing was peculiar. The stout man's idea was evidently to distribute the weight of the gold as unostentatiously as possible through his luggage. It was by no means an inconsiderable weight. There was, Mr. Ledbetter says, altogether nearly £18,000 in gold in the black

bag and on the table. There were also many little rolls of £5 bank-notes. Each rouleau of £25 was wrapped by Mr Ledbetter in paper. These rouleaux were then put neatly in cigar-boxes and distributed between a travelling trunk, a Gladstone bag, and a hat-box. About £600 went in a tobacco tin in a dressing-bag. £10 in gold and a number of £5 notes the stout man pocketed. Occasionally he objurgated Mr. Ledbetter's clumsiness, and urged him to hurry, and several times he appealed to Mr. Ledbetter's watch for information.

Mr. Ledbetter strapped the trunk and bag, and returned the stout man the keys. It was then ten minutes to twelve, and until the stroke of midnight the stout man made him sit on the Gladstone bag, while he sat at a reasonably safe distance on the trunk and held the revolver handy and waited. He appeared to be now in a less aggressive mood, and having watched Mr. Ledbetter for some time, he offered a few remarks.

"From your accent I judge you are a man of some education," he said, lighting a cigar. "No—*don't* begin that explanation of yours. I know it will be long-winded from your face, and I am much too old a liar to be interested in other men's lying. You are, I say, a person of education. You do well to dress as a curate. Even among educated people you might pass as a curate."

"I *am* a curate," said Mr. Ledbetter, "or, at least——"

"You are trying to be. I know. But you didn't ought to burgle. You are not the man to burgle. You are, if I may say it—the thing will have been pointed out to you before—a coward."

"Do you know," said Mr. Ledbetter, trying to get a final opening, "it was that very question——"

The stout man waved him into silence.

"You waste your education in burglary. You should do one of two things. Either you should forge or you should embezzle. For my own part, I embezzle. Yes; I embezzle. What do you think a man could be doing with all this gold but that? Ah! Listen! Midnight! . . . Ten. Eleven. Twelve. There is something very impressive to me in that slow beating of the hours. Time—space; what mysteries they are! What mysteries. . . . It's time for us to be moving. Stand up!"

And then kindly, but firmly, he induced Mr. Ledbetter to sling the dressing-bag over his back by a string across his chest, to shoulder the trunk, and, over-ruling a gasping protest, to take the Gladstone bag in his disengaged hand. So encumbered, Mr. Ledbetter struggled perilously downstairs. The stout gentleman followed with an overcoat, the hat box, and the revolver, making derogatory remarks about Mr. Ledbetter's strength, and assisting him at the turnings of the stairs.

"The back door," he directed, and Mr. Ledbetter staggered

through a conservatory, leaving a wake of smashed flower-pots behind him. "Never mind the crockery," said the stout man; "it's good for trade. We wait here until a quarter past. You can put those things down. You have!"

Mr. Ledbetter collapsed panting on the trunk. "Last night," he gasped, "I was asleep in my little room, and I no more dreamt——"

"There's no need for you to incriminate yourself," said the stout gentleman, looking at the lock of the revolver. He began to hum. Mr. Ledbetter made to speak, and thought better of it.

There presently came the sound of a bell, and Mr. Ledbetter was taken to the back door and instructed to open it. A fair-haired man in yachting costume entered. At the sight of Mr. Ledbetter he started violently and clapped his hand behind him. Then he saw the stout man. "Bingham!" he cried, "who's this?"

"Only a little philanthropic do of mine—burglar I'm trying to reform. Caught him under my bed just now. He's all right. He's a frightful ass. He'll be useful to carry some of our things."

The newcomer seemed inclined to resent Mr. Ledbetter's presence at first, but the stout man reassured him.

"He's quite alone. There's not a gang in the world would own him. No——! Don't start talking, for goodness' sake."

They went out into the darkness of the garden, with the trunk still bowing Mr. Ledbetter's shoulders. The man in yachting costume walked in front with the Gladstone bag and a pistol; then came Mr. Ledbetter like Atlas; Mr. Bingham followed with the hat-box, coat, and revolver as before. The house was one of those that have their gardens right up to the cliff. At the cliff was a steep wooden stairway, descending to a bathing tent dimly visible on the beach. Below was a boat pulled up, and a silent little man with a black face stood beside it. "A few moments' explanation," said Mr. Ledbetter; "I can assure you——" Somebody kicked him, and he said no more.

They made him wade to the boat carrying the trunk, they pulled him aboard by the shoulders and hair, they called him no better name than "scoundrel" and "burglar" all that night. But they spoke in undertones so that the general public was happily unaware of his ignominy. They hauled him aboard a yacht manned by strange, unsympathetic Orientals, and partly they thrust him and partly he fell down a gangway into a noisome, dark place, where he was to remain many days—how many he does not know, because he lost count among other things when he was sea-sick. They fed him on biscuits and incomprehensible words; they gave him water to drink mixed with unwished-for rum. And there

were cockroaches where they put him—night and day there were cockroaches, and in the night-time there were rats. The Orientals emptied his pockets and took his watch—but Mr. Bingham being appealed to, took that himself. And five or six times the five Lascars—if they were Lascars—and the Chinaman and the negro who constituted the crew, fished him out and took him aft to Bingham and his friend to play cribbage and euchre and three-handed whist, and to listen to their stories and boastings in an interested manner.

Then these principals would talk to him as men talk to those who have lived a life of crime. Explanations they would never permit, though they made it abundantly clear to him that he was the rummiest burglar they had ever set eyes on. They said as much again and again. The fair man was of a taciturn disposition and irascible at play; but Mr. Bingham, now that the evident anxiety of his departure from England was assuaged, displayed a vein of genial philosophy. He enlarged upon the mystery of space and time, and quoted Kant and Hegel—or, at least, he said he did. Several times Mr. Ledbetter got as far as: "My position under your bed, you know——" but then he always had to cut, or pass the whisky, or do some such intervening thing. After his third failure, the fair man got quite to look for this opening, and whenever Mr. Ledbetter began after that, he would roar with laughter and hit him violently on the back. "Same old start, same old story; good old burglar!" the fair-haired man would say.

So Mr. Ledbetter suffered for many days, twenty perhaps; and one evening he was taken, together with some tinned provisions, over the side and put ashore on a rocky little island with a spring. Mr. Bingham came in the boat with him, giving him good advice all the way, and waving his last attempts at an explanation aside.

"I am really *not* a burglar," said Mr. Ledbetter.

"You never will be," said Mr. Bingham. "You'll never make a burglar. I'm glad you are beginning to see it. In choosing a profession a man must study his temperament. If you don't, sooner or later you will fail. Compare myself, for example. All my life I have been in banks—I have got on in banks. I have even been a bank manager. But was I happy? No. Why wasn't I happy? Because it did not suit my temperament. I am too adventurous—too versatile. Practically I have thrown it over. I do not suppose I shall ever manage a bank again. They would be glad to get me, no doubt; but I have learnt the lesson of my temperament—at last. . . . No! I shall never manage a bank again.

"Now, your temperament unfits you for crime—just as mine unfits me for respectability. I know you better than I did, and now I do not even recommend forgery. Go back to respectable courses, my man. *Your* lay is the philanthropic

lay—that is your lay. With that voice—the Association for the Promotion of Snivelling among the Young—something in that line. You think it over.

"The island we are approaching has no name apparently—at least, there is none on the chart. You might think out a name for it while you are there—while you are thinking about all these things. It has quite drinkable water, I understand. It is one of the Grenadines—one of the Windward Islands. Yonder, dim and blue, are others of the Grenadines. There are quantities of Grenadines, but the majority are out of sight. I have often wondered what these islands are for—now, you see, I am wiser. This one at least is for you. Sooner or later some simple native will come along and take you off. Say what you like about us then—abuse us, if you like—we shan't care a solitary Grenadine! And here—here is half a sovereign's worth of silver. Do not waste that in foolish dissipation when you return to civilisation. Properly used, it may give you a fresh start in life. And do not—— Don't beach her, you beggars, he can wade!—— Do not waste the precious solitude before you in foolish thoughts. Properly used, it may be a turning-point in your career. Waste neither money nor time. You will die rich. I'm sorry, but I must ask you to carry your tucker to land in your arms. No; it's not deep. Curse that explanation of yours! There's not time. No, no, no! I won't listen. Overboard you go!"

And the falling night found Mr. Ledbetter—the Mr. Ledbetter who had complained that adventure was dead—sitting beside his cans of food, his chin resting upon his drawn-up knees, staring through his glasses in dismal mildness over the shining, vacant sea.

He was picked up in the course of three days by a negro fisherman and taken to St. Vincent's, and from St. Vincent's he got, by the expenditure of his last coins, to Kingston, in Jamaica. And there he might have foundered. Even nowadays he is not a man of affairs, and then he was a singularly helpless person. He had not the remotest idea what he ought to do. The only thing he seems to have done was to visit all the ministers of religion he could find in the place to borrow a passage home. But he was much too dirty and incoherent—and his story far too incredible for them. I met him quite by chance. It was close upon sunset, and I was walking out after my siesta on the road to Dunn's Battery, when I met him—I was rather bored, and with a whole evening on my hands—luckily for him. He was trudging dismally towards the town. His woebegone face and the quasi-clerical cut of his dust-stained, filthy costume caught my humour. Our eyes met. He hesitated. "Sir," he said with a catching of the breath, "could you spare a few minutes for what I fear will seem an incredible story?"

"Incredible!" I said.

"Quite," he answered eagerly. "No one will believe it, alter it though I may. Yet I can assure you, sir——"

He stopped hopelessly. The man's tone tickled me. He seemed an odd character. "I am," he said, "one of the most unfortunate beings alive."

"Among other things, you haven't dined?" I said, struck with an idea.

"I have not," he said solemnly, "for many days."

"You'll tell it better after that," I said; and without more ado led the way to a low place I knew, where such a costume as his was unlikely to give offence. And there—with certain omissions which he subsequently supplied, I got his story. At first I was incredulous, but as the wine warmed him, and the faint suggestion of cringing which his misfortunes had added to his manner disappeared, I began to believe. At last, I was so far convinced of his sincerity that I got him a bed for the night, and next day verified the banker's reference he gave me through my Jamaica banker. And that done, I took him shopping for underwear and such-like equipments of a gentleman at large. Presently came the verified reference. His astonishing story was true. I will not amplify our subsequent proceedings. He started for England in three days' time.

"I do not know how I can possibly thank you enough," began the letter he wrote me from England, "for all your kindness to a total stranger," and proceeded for some time in a similar strain. "Had it not been for your generous assistance, I could certainly never have returned in time for the resumption of my scholastic duties, and my few minutes of reckless folly would, perhaps, have proved my ruin. As it is, I am entangled in a tissue of lies and evasions, of the most complicated sort, to account for my sunburnt appearance and my whereabouts. I have rather carelessly told two or three different stories, not realising the trouble this would mean for me in the end. The truth I dare not tell. I have consulted a number of law books in the British Museum, and there is not the slightest doubt that I have connived at and abetted and aided a felony. That scoundrel Bingham was the Hithergate bank manager, I find, and guilty of the most flagrant embezzlement. Please, please burn this letter when read—I trust you implicitly. The worst of it is, neither my aunt nor her friend who kept the boarding-house at which I was staying seem altogether to believe a guarded statement I have made them—practically of what actually happened. They suspect me of some discreditable adventure, but what sort of discreditable adventure they suspect me of, I do not know. My aunt says she would forgive me if I told her everything. I have—I have told her *more* than everything, and still she is not satisfied. It would never do to let them know the truth of the case, of course, and so I represent myself as having been waylaid and gagged upon the beach.

My aunt wants to know *why* they waylaid and gagged me, why they took me away in their yacht. I do not know. Can you suggest any reason? I can think of nothing. If, when you wrote, you could write on two sheets so that I could show her one, and on that one if you could show clearly that I really *was* in Jamaica this summer, and had come there by being removed from a ship, it would be of great service to me. It would certainly add to the load of my obligation to you—a load that I fear I can never fully repay. Although if gratitude. . . ." And so forth. At the end he repeated his request for me to burn the letter.

So the remarkable story of Mr. Ledbetter's Vacation ends. That breach with his aunt was not of long duration. The old lady had forgiven him before she died.

STORY FOUR

A DREAM OF ARMAGEDDON

THE man with the white face entered the carriage at Rugby. He moved slowly in spite of the urgency of his porter, and even while he was still on the platform I noted how ill he seemed. He dropped into the corner over against me with a sigh, made an incomplete attempt to arrange his travelling shawl, and became motionless, with his eyes staring vacantly. Presently he was moved by a sense of my observation, looked up at me, and put out a spiritless hand for his newspaper. Then he glanced again in my direction.

I feigned to read. I feared I had unwittingly embarrassed him, and in a moment I was surprised to find him speaking.

"I beg your pardon?" said I.

"That book," he repeated, pointing a lean finger, "is about dreams."

"Obviously," I answered, for it was Fortnum-Roscoe's *Dream States*, and the title was on the cover.

He hung silent for a space as if he sought words.

"Yes," he said at last, "but they tell you nothing."

I did not catch his meaning for a second.

"They don't know," he added.

I looked a little more attentively at his face.

"There are dreams," he said, "and dreams."

That sort of proposition I never dispute.

"I suppose——" he hesitated. "Do you ever dream? I mean vividly."

"I dream very little," I answered. "I doubt if I have three vivid dreams a year."

"Ah!" he said, and seemed for a moment to collect his thoughts.

"Your dreams don't mix with your memories?" he asked abruptly. "You don't find yourself in doubt; did this happen or did it not?"

"Hardly ever. Except just for a momentary hesitation now and then. I suppose few people do."

"Does *he* say——" he indicated the book.

"Says it happens at times, and gives the usual explanation about intensity of impression and the like to account for its not happening as a rule. I suppose you know something of these theories——"

"Very little—except that they are wrong."

His emaciated hand played with the strap of the window for a time. I prepared to resume reading, and that seemed to precipitate his next remark. He leant forward almost as though he would touch me.

"Isn't there something called consecutive dreaming—that goes on night after night?"

"I believe there is. There are cases given in most books on mental trouble."

"Mental trouble! Yes. I dare say there are. It's the right place for them. But what I mean——" He looked at his bony knuckles. "Is that sort of thing always dreaming? *Is* it dreaming? Or is it something else? Mightn't it be something else?"

I should have snubbed his persistent conversation but for the drawn anxiety of his face. I remember now the look of his faded eyes and the lids red stained—perhaps you know that look.

"I'm not just arguing about a matter of opinion," he said. "The thing's killing me."

"Dreams?"

"If you call them dreams. Night after night. Vivid!—so vivid . . . this——" (he indicated the landscape that went streaming by the window) "seems unreal in comparison! I can scarcely remember who I am, what business I am on. . . ."

He paused. "Even now——"

"The dream is always the same—do you mean?" I asked.

"It's over."

"You mean?"

"I died."

"Died?"

"Smashed and killed, and now, so much of me as that dream was, is dead. Dead for ever. I dreamt I was another man, you know, living in a different part of the world and in a different time. I dreamt that night after night. Night after night I woke into that other life. Fresh scenes and fresh happenings—until I came upon the last——"

"When you died?"

"When I died."

"And since then——"

"No," he said. "Thank God! That was the end of the dream. . . ."

It was clear I was in for this dream. And after all, I had an hour before me, the light was fading fast, and Fortnum-Roscoe has a dreary way with him. "Living in a different time," I said: "do you mean in some different age?"

"Yes."

"Past?"

"No—to come—to come."

"The year three thousand, for example?"

"I don't know what year it was. I did when I was asleep, when I was dreaming, that is, but not now—not now that I am awake. There's a lot of things I have forgotten since I woke out of these dreams, though I knew them at the time when I was—I suppose it was dreaming. They called the

year differently from our way of calling the year. . . . What *did* they call it ? " He put his hand to his forehead. " No," said he, " I forget."

He sat smiling weakly. For a moment I feared he did not mean to tell me his dream. As a rule I hate people who tell their dreams, but this struck me differently. I proffered assistance even. " It began——" I suggested.

" It was vivid from the first. I seemed to wake up in it suddenly. And it's curious that in these dreams I am speaking of I never remembered this life I am living now. It seemed as if the dream life was enough while it lasted. Perhaps—— But I will tell you how I find myself when I do my best to recall it all. I don't remember anything clearly until I found myself sitting in a sort of loggia looking out over the sea. I had been dozing, and suddenly I woke up—fresh and vivid—not a bit dreamlike—because the girl had stopped fanning me."

" The girl ? "

" Yes, the girl. You must not interrupt or you will put me out."

He stopped abruptly. " You won't think I'm mad ? " he said.

" No," I answered ; " you've been dreaming. Tell me your dream."

" I woke up, I say, because the girl had stopped fanning me. I was not surprised to find myself there or anything of that sort, you understand. I did not feel I had fallen into it suddenly. I simply took it up at that point. Whatever memory I had of *this* life, this nineteenth-century life, faded as I woke, vanished like a dream. I knew all about myself, knew that my name was no longer Cooper but Hedon, and all about my position in the world. I've forgotten a lot since I woke—there's a want of connection—but it was all quite clear and matter of fact then."

He hesitated again, gripping the window strap, putting his face forward and looking up to me appealingly.

" This seems bosh to you ? "

" No, no ! " I cried. " Go on. Tell me what this loggia was like."

" It was not really a loggia—I don't know what to call it. It faced south. It was small. It was all in shadow except the semicircle above the balcony that showed the sky and sea and the corner where the girl stood. I was on a couch—it was a metal couch with light striped cushions—and the girl was leaning over the balcony with her back to me. The light of the sunrise fell on her ear and cheek. Her pretty white neck and the little curls that nestled there, and her white shoulder were in the sun, and all the grace of her body was in the cool blue shadow. She was dressed—how can I describe it ? It was easy and flowing. And altogether

there she stood, so that it came to me how beautiful and desirable she was, as though I had never seen her before. And when at last I sighed and raised myself upon my arm she turned her face to me——"

He stopped.

"I have lived three-and-fifty years in this world. I have had mother, sisters, friends, wife and daughters—all their faces, the play of their faces, I know. But the face of this girl—it is much more real to me. I can bring it back into memory so that I see it again—I could draw it or paint it. And after all——"

He stopped—but I said nothing.

"The face of a dream—the face of a dream. She was beautiful. Not that beauty which is terrible, cold, and worshipful, like the beauty of a saint; nor that beauty that stirs fierce passions; but a sort of radiation, sweet lips that softened into smiles, and grave grey eyes. And she moved gracefully, she seemed to have part with all pleasant and gracious things——"

He stopped, and his face was downcast and hidden. Then he looked up at me and went on, making no further attempt to disguise his absolute belief in the reality of his story.

"You see, I had thrown up my plans and ambitions, thrown up all I had ever worked for or desired for her sake. I had been a master man away there in the north, with influence and property and a great reputation, but none of it had seemed worth having beside her. I had come to the place, this city of sunny pleasures, with her, and left all those things to wreck and ruin just to save a remnant at least of my life. While I had been in love with her before I knew that she had any care for me, before I had imagined that she would dare—that we should dare, all my life had seemed vain and hollow, dust and ashes. It *was* dust and ashes. Night after night and through the long days I had longed and desired—my soul had beaten against the thing forbidden!

"But it is impossible for one man to tell another just these things. It's emotion, it's a tint, a light that comes and goes. Only while it's there, everything changes, everything. The thing is I came away and left them in their Crisis to do what they could."

"Left whom?" I asked, puzzled.

"The people up in the north there. You see—in this dream, anyhow—I had been a big man, the sort of man men come to trust in, to group themselves about. Millions of men who had never seen me were ready to do things and risk things because of their confidence in me. I had been playing that game for years, that big laborious game, that vague, monstrous political game amidst intrigues and betrayals, speech and agitation. It was a vast weltering world, and at last I had a sort of leadership against the Gang—you know

it was called the Gang—a sort of compromise of scoundrelly projects and base ambitions and vast public emotional stupidities and catch-words—the Gang that kept the world noisy and blind year by year, and all the while that it was drifting, drifting towards infinite disaster. But I can't expect you to understand the shades and complications of the year—the year something or other ahead. I had it all—down to the smallest details—in my dream. I suppose I had been dreaming of it before I awoke, and the fading outline of some queer new development I had imagined still hung about me as I rubbed my eyes. It was some grubby affair that made me thank God for the sunlight. I sat up on the couch and remained looking at the woman and rejoicing—rejoicing that I had come away out of all that tumult and folly and violence before it was too late. After all, I thought, this is life—love and beauty, desire and delight, are they not worth all those dismal struggles for vague, gigantic ends. And I blamed myself for having ever sought to be a leader when I might have given my days to love. But then, thought I, if I had not spent my early days sternly and austerely, I might have wasted myself upon vain and worthless women, and at the thought all my being went out in love and tenderness to my dear mistress, my dear lady, who had come at last and compelled me—compelled me by her invincible charm for me—to lay that life aside.

"'You are worth it,' I said, speaking without intending her to hear; 'you are worth it, my dearest one; worth pride and praise and all things. Love! to have *you* is worth them all together.' And at the murmur of my voice she turned about.

"'Come and see,' she cried—I can hear her now—'come and see the sunrise upon Monte Solaro.'

"I remember how I sprang to my feet and joined her at the balcony. She put a white hand upon my shoulder and pointed towards great masses of limestone, flushing, as it were, into life. I looked. But first I noted the sunlight on her face caressing the lines of her cheeks and neck. How can I describe to you the scene we had before us? We were at Capri——"

"I have been there," I said. "I have clambered up Monte Solaro and drunk *vero Capri*—muddy stuff like cider—at the summit."

"Ah!" said the man with the white face; "then perhaps you can tell me—you will know if this was indeed Capri. For in this life I have never been there. Let me describe it. We were in a little room, one of a vast multitude of little rooms, very cool and sunny, hollowed out of the limestone of a sort of cape, very high above the sea. The whole island, you know, was one enormous hotel, complex beyond explaining, and on the other side there were miles of floating hotels,

and huge floating stages to which the flying machines came. They called it a pleasure city. Of course, there was none of that in your time—rather, I should say, *is* none of that *now*. Of course. Now!—yes.

"Well, this room of ours was at the extremity of the cape, so that one could see east and west. Eastward was a great cliff—a thousand feet high perhaps—coldly grey except for one bright edge of gold, and beyond it the Isle of the Sirens, and a falling coast that faded and passed into the hot sunrise. And when one turned to the west, distinct and near was a little bay, a scimitar of beach still in shadow. And out of that shadow rose Solaro straight and tall, flushed and golden crested, like a beauty throned, and the white moon was floating behind her in the sky. And before us from east to west stretched the many-tinted sea all dotted with sailing boats.

"To the eastward, of course, these little boats were grey and very minute and clear, but to the westward they were little boats of gold—shining gold—almost like little flames. And just below us was a rock with an arch worn through it. The blue sea-water broke to green and foam all round the rock, and a galley came gliding out of the arch."

"I know that rock," I said. "I was nearly drowned there. It is called the Faraglioni."

"*I Faraglioni?* Yes, *she* called it that," answered the man with the white face. "There was some story—but that——"

He put his hand to his forehead again. "No," he said, "I forget that story.

"Well, that is the first thing I remember, the first dream I had, that shaded room and the beautiful air and sky and that dear lady of mine, with her shining arms and her graceful robe, and how we sat and talked in half whispers to one another. We talked in whispers, not because there was any one to hear, but because there was still such a freshness of mind between us that our thoughts were a little frightened, I think, to find themselves at last in words. And so they went softly.

"Presently we were hungry and we went from our apartment, going by a strange passage with a moving floor, until we came to the great breakfast room—there was a fountain and music. A pleasant and joyful place it was, with its sunlight and splashing, and the murmur of plucked strings. And we sat and ate and smiled at one another, and I would not heed a man who was watching me from a table near by.

"And afterwards we went on to the dancing-hall. But I cannot describe that hall. The place was enormous—larger than any building you have ever seen—and in one place there was the old gate of Capri, caught into the wall of a gallery high overhead. Light girders, stems and threads of gold, burst from the pillars like fountains, streamed like an Aurora

across the roof and interlaced, like—like conjuring tricks. All about the great circle for the dancers there were beautiful figures, strange dragons, and intricate and wonderful grotesques bearing lights. The place was inundated with artificial light that shamed the newborn day. And as we went through the throng the people turned about and looked at us, for all through the world my name and face were known, and how I had suddenly thrown up pride and struggle to come to this place. And they looked also at the lady beside me, though half the story of how at last she had come to me was unknown or mistold. And few of the men who were there, I know, but judged me a happy man, in spite of all the shame and dishonour that had come upon my name.

"The air was full of music, full of harmonious scents, full of the rhythm of beautiful motions. Thousands of beautiful people swarmed about the hall, crowded the galleries, sat in a myriad recesses; they were dressed in splendid colours and crowned with flowers; thousands danced about the great circle beneath the white images of the ancient gods, and glorious processions of youths and maidens came and went. We two danced, not the dreary monotonies of your days—of this time, I mean—but dances that were beautiful, intoxicating. And even now I can see my lady dancing—dancing joyously. She danced, you know, with a serious face; she danced with a serious dignity, and yet she was smiling at me and caressing me—smiling and caressing with her eyes.

"The music was different," he murmured. "It went—I cannot describe it; but it was infinitely richer and more varied than any music that has ever come to me awake.

"And then—it was when we had done dancing—a man came to speak to me. He was a lean, resolute man, very soberly clad for that place, and already I had marked his face watching me in the breakfasting hall, and afterwards as we went along the passage I had avoided his eye. But now, as we sat in an alcove, smiling at the pleasure of all the people who went to and fro across the shining floor, he came and touched me, and spoke to me so that I was forced to listen. And he asked that he might speak to me for a while apart.

"'No,' I said. 'I have no secrets from this lady. What do you want to tell me?'

"He said it was a trivial matter, or at least a dry matter, for a lady to hear.

"'Perhaps for me to hear,' said I.

"He glanced at her, as though almost he would appeal to her. Then he asked me suddenly if I had heard of a great and avenging declaration that Evesham had made. Now, Evesham had always before been the man next to myself in the leadership of that great party in the north. He was a forcible, hard, and tactless man, and only I had been able

to control and soften him. It was on his account, even more than my own, I think, that the others had been so dismayed at my retreat. So this question about what he had done re-awakened my old interest in the life I had put aside just for a moment.

"'I have taken no heed of any news for many days,' I said. 'What has Evesham been saying?'

"And with that the man began, nothing loth, and I must confess even I was struck by Evesham's reckless folly in the wild and threatening words he had used. And this messenger they had sent to me not only told me of Evesham's speech, but went on to ask counsel and to point out what need they had of me. While he talked, my lady sat a little forward and watched his face and mine.

"My old habits of scheming and organising re-asserted themselves. I could even see myself suddenly returning to the north, and all the dramatic effect of it. All that this man said witnessed to the disorder of the party indeed, but not to its damage. I should go back stronger than I had come. And then I thought of my lady. You see—how can I tell you? There were certain peculiarities of our relationship—as things are I need not tell you about that—which would render her presence with me impossible. I should have had to leave her; indeed, I should have had to renounce her clearly and openly, if I was to do all that I could do in the north. And the man knew *that*, even as he talked to her and me, knew it as well as she did, that my steps to duty were—first, separation, then abandonment. At the touch of that thought my dream of a return was shattered. I turned on the man suddenly, as he was imagining his eloquence was gaining ground with me.

"'What have I to do with these things now?' I said. 'I have done with them. Do you think I am coquetting with your people in coming here?'

"'No,' he said; 'but——'

"'Why cannot you leave me alone. I have done with these things. I have ceased to be anything but a private man.'

"'Yes,' he answered. 'But have you thought?—this talk of war, these reckless challenges, these wild aggressions——"

"I stood up.

"'No,' I cried. 'I won't hear you. I took count of all those things, I weighed them—and I have come away.'

"He seemed to consider the possibility of persistence. He looked from me to where the lady sat regarding us.

"'War,' he said, as if he were speaking to himself, and then turned slowly from me and walked away.

"I stood, caught in the whirl of thoughts his appeal had set going.

"I heard my lady's voice.

"'Dear,' she said; 'but if they have need of you——'

"She did not finish her sentence, she let it rest there. I turned to her sweet face, and the balance of my mood swayed and reeled.

"'They want me only to do the thing they dare not do themselves,' I said. 'If they distrust Evesham they must settle with him themselves.'

"She looked at me doubtfully.

"'But war——' she said.

"I saw a doubt on her face that I had seen before, a doubt of herself and me, the first shadow of the discovery that, seen strongly and completely, must drive us apart for ever.

"Now I was an older mind than hers, and I could sway her to this belief or that.

"'My dear one,' I said, 'you must not trouble over these things. There will be no war. Certainly there will be no war. The age of wars is past. Trust me to know the justice of this case. They have no right upon me, dearest, and no one has a right upon me. I have been free to choose my life, and I have chosen this.'

"'But *war*——,' she said.

"I sat down beside her. I put an arm behind her and took her hand in mine. I set myself to drive that doubt away—I set myself to fill her mind with pleasant things again. I lied to her, and in lying to her I lied also to myself. And she was only too ready to believe me, only too ready to forget.

"Very soon the shadow had gone again, and we were hastening to our bathing-place in the Grotta del Bove Marino, where it was our custom to bathe every day. We swam and splashed one another, and in that buoyant water I seemed to become something lighter and stronger than a man. And at last we came out dripping and rejoicing and raced among the rocks. And then I put on a dry bathing-dress, and we sat to bask in the sun, and presently I nodded, resting my head against her knee, and she put her hand upon my hair and stroked it softly and I dozed. And behold! as it were with the snapping of the string of a violin, I was awakening, and I was in my own bed in Liverpool, in the life of to-day.

"Only for a time I could not believe that all these vivid moments had been no more than the substance of a dream.

"In truth, I could not believe it a dream for all the sobering reality of things about me. I bathed and dressed as it were by habit, and as I shaved I argued why I of all men should leave the woman I loved to go back to fantastic politics in the hard and strenuous north. Even if Evesham did force the world back to war, what was that to me? I was a man with the heart of a man, and why should I feel the responsibility of a deity for the way the world might go?

"You know that is not quite the way I think about affairs, about my real affairs. I am a solicitor, you know, with a point of view.

"The vision was so real, you must understand, so utterly unlike a dream that I kept perpetually recalling trivial irrelevant details; even the ornament of a book-cover that lay on my wife's sewing-machine in the breakfast-room recalled with the utmost vividness the gilt line that ran about the seat in the alcove where I had talked with the messenger from my deserted party. Have you ever heard of a dream that had a quality like that?"

"Like—— ?"

"So that afterwards you remembered details you had forgotten."

I thought. I had never noticed the point before, but he was right.

"Never," I said. "That is what you never seem to do with dreams."

"No," he answered. "But that is just what I did. I am a solicitor, you must understand, in Liverpool, and I could not help wondering what the clients and business people I found myself talking to in my office would think if I told them suddenly I was in love with a girl who would be born a couple of hundred years or so hence, and worried about the politics of my great-great-great-grand-children. I was chiefly busy that day negotiating a ninety-nine-year building lease. It was a private builder in a hurry, and we wanted to tie him in every possible way. I had an interview with him, and he showed a certain want of temper that sent me to bed still irritated. That night I had no dream. Nor did I dream the next night, at least, to remember.

"Something of that intense reality of conviction vanished. I began to feel sure it *was* a dream. And then it came again.

"When the dream came again, nearly four days later, it was very different. I think it certain that four days had also elapsed in the dream. Many things had happened in the north, and the shadow of them was back again between us, and this time it was not so easily dispelled. I began I know with moody musings. Why, in spite of all, should I go back, go back for all the rest of my days to toil and stress, insults and perpetual dissatisfaction, simply to save hundreds of millions of common people, whom I did not love, whom too often I could do no other than despise, from the stress and anguish of war and infinite misrule? And after all I might fail. *They* all sought their own narrow ends, and why should not I—why should not I also live as a man? And out of such thoughts her voice summoned me, and I lifted my eyes.

"I found myself awake and walking. We had come out above the Pleasure City, we were near the summit of Monte Solaro and looking towards the bay. It was the late afternoon

and very clear. Far away to the left Ischia hung in a golden haze between sea and sky, and Naples was coldly white against the hills, and before us was Vesuvius with a tall and slender streamer feathering at last towards the south, and the ruins of Torre Annunziata and Castellamare glittering and near."

I interrupted suddenly: "You have been to Capri, of course?"

"Only in this dream," he said, "only in this dream. All across the bay beyond Sorrento were the floating palaces of the Pleasure City moored and chained. And northward were the broad floating stages that received the aeroplanes. Aeroplanes fell out of the sky every afternoon, each bringing its thousands of pleasure-seekers from the uttermost parts of the earth to Capri and its delights. All these things, I say, stretched below.

"But we noticed them only incidentally because of an unusual sight that evening had to show. Five war aeroplanes that had long slumbered useless in the distant arsenals of the Rhinemouth were manœuvring now in the eastward sky. Evesham had astonished the world by producing them and others, and sending them to circle here and there. It was the threat material in the great game of bluff he was playing, and it had taken even me by surprise. He was one of those incredibly stupid energetic people who seem sent by heaven to create disasters. His energy to the first glance seemed so wonderfully like capacity! But he had no imagination, no invention, only a stupid, vast, driving force of will, and a mad faith in his stupid idiot 'luck' to pull him through. I remember how we stood out upon the headland watching the squadron circling far away, and how I weighed the full meaning of the sight, seeing clearly the way things must go. And then even it was not too late. I might have gone back, I think, and saved the world. The people of the north would follow me, I knew, granted only that in one thing I respected their moral standards. The east and south would trust me as they would trust no other northern man. And I knew I had only to put it to her and she would have let me go. . . . Not because she did not love me!

"Only I did not want to go; my will was all the other way about. I had so newly thrown off the incubus of responsibility: I was still so fresh a renegade from duty that the daylight clearness of what I *ought* to do had no power at all to touch my will. My will was to live, to gather pleasures and make my dear lady happy. But though this sense of vast neglected duties had no power to draw me, it could make me silent and preoccupied, it robbed the days I had spent of half their brightness and roused me into dark meditations in the silence of the night. And as I stood and watched Evesham's aeroplanes sweep to and fro—those birds of

infinite ill omen—she stood beside me watching me, perceiving the trouble indeed, but not perceiving it clearly—her eyes questioning my face, her expression shaded with perplexity. Her face was grey because the sunset was fading out of the sky. It was no fault of hers that she held me. She had asked me to go from her, and again in the night time and with tears she had asked me to go.

"At last it was the sense of her that roused me from my mood. I turned upon her suddenly and challenged her to race down the mountain slopes. 'No,' she said, as if I jarred with her gravity; but I was resolved to end that gravity, and made her run—no one can be very grey and sad who is out of breath—and when she stumbled I ran with my hand beneath her arm. We ran down past a couple of men, who turned back staring in astonishment at my behaviour—they must have recognised my face. And half-way down the slope came a tumult in the air, clang-clank, clang-clank, and we stopped, and presently over the hill-crest those war things came flying one behind the other."

The man seemed hesitating on the verge of a description.

"What were they like?" I asked.

"They had never fought," he said. "They were just like our ironclads are nowadays; they had never fought. No one knew what they might do, with excited men inside them; few even cared to speculate. They were great driving things shaped like spear-heads without a shaft, with a propeller in the place of the shaft."

"Steel?"

"Not steel."

"Aluminium?"

"No, no, nothing of that sort. An alloy that was very common—as common as brass, for example. It was called—let me see——" He squeezed his forehead with the fingers of one hand. "I am forgetting everything," he said.

"And they carried guns?"

"Little guns, firing high explosive shells. They fired the guns backwards, out of the base of the leaf, so to speak, and rammed with the beak. That was the theory, you know, but they had never been fought. No one could tell exactly what was going to happen. And meanwhile I suppose it was very fine to go whirling through the air like a flight of young swallows, swift and easy. I guess the captains tried not to think too clearly what the real thing would be like. And these flying war machines, you know, were only one sort of the endless war contrivances that had been invented and had fallen into abeyance during the long peace. There were all sorts of these things that people were routing out and furbishing up; infernal things, silly things; things that had never been tried; big engines, terrible explosives, great guns. You know the silly way of the ingenious sort of men

who make these things ; they turn 'em out as beavers build dams, and with no more sense of the rivers they're going to divert and the lands they're going to flood !

" As we went down the winding stepway to our hotel again in the twilight, I foresaw it all : I saw how clearly and inevitably things were driving for war in Evesham's silly, violent hands, and I had some inkling of what war was bound to be under these new conditions. And even then, though I knew it was drawing near the limit of my opportunity, I could find no will to go back."

He sighed.

" That was my last chance.

" We didn't go into the city until the sky was full of stars, so we walked out upon the high terrace, to and fro, and—she counselled me to go back.

" ' My dearest,' she said, and her sweet face looked up to me, ' this is Death. This life you lead is Death. Go back to them, go back to your duty——'

" She began to weep, saying, between her sobs, and clinging to my arm as she said it, ' Go back—Go back.'

" Then suddenly she fell mute, and, glancing down at her face, I read in an instant the thing she had thought to do. It was one of those moments when one *sees*.

" ' No ! ' I said.

" ' No ? ' she asked, in surprise, and I think a little fearfu at the answer to her thought.

" ' Nothing,' I said, ' shall send me back. Nothing ! I have chosen. Love, I have chosen, and the world must go. Whatever happens I will live this life—I will live for *you* ! It —nothing shall turn me aside ; nothing, my dear one. Even if you died—even if you died——'

" ' Yes ? ' she murmured softly.

" ' Then—I also would die.'

" And before she could speak again I began to talk, talking eloquently—as I *could* do in that life—talking to exalt love, to make the life we were living seem heroic and glorious ; and the thing I was deserting something hard and enormously ignoble that it was a fine thing to set aside. I bent all my mind to throw that glamour upon it, seeking not only to convert her but myself to that. We talked, and she clung to me, torn too between all that she deemed noble and all that she knew was sweet. And at last I did make it heroic, made all the thickening disaster of the world only a sort of glorious setting to our unparalleled love, and we two poor foolish souls strutted there at last, clad in that splendid delusion, drunken rather with that glorious delusion, under the still stars.

" And so my moment passed.

" It was my last chance. Even as we went to and fro there, the leaders of the south and east were gathering their

resolve, and the hot answer that shattered Evesham's bluffing for ever, took shape and waited. And all over Asia, and the ocean, and the South, the air and the wires were throbbing with their warnings to prepare—prepare.

"No one living, you know, knew what war was; no one could imagine, with all these new inventions, what horror war might bring. I believe most people still believed it would be a matter of bright uniforms and shouting charges and triumphs and flags and bands—in a time when half the world drew its food supply from regions ten thousand miles away——"

The man with the white face paused. I glanced at him, and his face was intent on the floor of the carriage. A little railway station, a string of loaded trucks, a signal-box, and the back of a cottage, shot by the carriage window, and a bridge passed with a clap of noise, echoing the tumult of the train.

"After that," he said, "I dreamt often. For three weeks of nights that dream was my life. And the worst of it was there were nights when I could not dream, when I lay tossing on a bed in *this* accursed life; and *there*—somewhere lost to me—things were happening—momentous, terrible things. . . . I lived at nights—my days, my waking days, this life I am living now, became a faded, far-away dream, a drab setting, the cover of the book."

He thought.

"I could tell you all, tell you every little thing in the dream, but as to what I did in the daytime—no. I could not tell—I do not remember. My memory—my memory has gone. The business of life slips from me——"

He leant forward, and pressed his hands upon his eyes. For a long time he said nothing.

"And then?" said I.

"The war burst like a hurricane."

He stared before him at unspeakable things.

"And then?" I urged again.

"One touch of unreality," he said, in the low tone of a man who speaks to himself, "and they would have been nightmares. But they were not nightmares—they were not nightmares. *No!*"

He was silent for so long that it dawned upon me that there was a danger of losing the rest of the story. But he went on talking again in the same tone of questioning self-communion.

"What was there to do but flight? I had not thought the war would touch Capri—I had seemed to see Capri as being out of it all, as the contrast to it all; but two nights after the whole place was shouting and bawling, every woman almost and every other man wore a badge—Evesham's badge—and there was no music but a jangling war-song over and over

again, and everywhere men enlisting, and in the dancing halls they were drilling. The whole island was awhirl with rumours; it was said, again and again, that fighting had begun. I had not expected this. I had seen so little of the life of pleasure that I had failed to reckon with this violence of the amateurs. And as for me, I was out of it. I was like a man who might have prevented the firing of a magazine. The time had gone. I was no one ; the vainest stripling with a badge counted for more than I. The crowd jostled us and bawled in our ears ; that accursed song deafened us ; a woman shrieked at my lady because no badge was on her, and we two went back to our own place again, ruffled and insulted—my lady white and silent, and I aquiver with rage. So furious was I, I could have quarrelled with her if I could have found one shade of accusation in her eyes.

"All my magnificence had gone from me. I walked up and down our rock cell, and outside was the darkling sea and a light to the southward that flared and passed and came again.

"'We must get out of this place,' I said over and over. 'I have made my choice, and I will have no hand in these troubles. I will have nothing of this war. We have taken our lives out of all these things. This is no refuge for us. Let us go.'

"And the next day we were already in flight from the war that covered the world.

"And all the rest was Flight—all the rest was Flight."

He mused darkly.

"How much was there of it ?"

He made no answer.

"How many days ?"

His face was white and drawn and his hands were clenched. He took no heed of my curiosity.

I tried to draw him back to his story with questions.

"Where did you go ?" I said.

"When ?"

"When you left Capri."

"South-west," he said, and glanced at me for a second. "We went in a boat."

"But I should have thought an aeroplane ?"

"They had been seized."

I questioned him no more. Presently I thought he was beginning again. He broke out in an argumentative monotone :

"But why should it be ? If, indeed, this battle, this slaughter and stress *is* life, why have we this craving for pleasure and beauty ? If there *is* no refuge, if there is no place of peace, and if all our dreams of quiet places are a folly and a snare, why have we such dreams ? Surely it was no ignoble cravings, no base intentions, had brought us to this ; it was Love had isolated us. Love had come to me

with her eyes and robed in her beauty, more glorious than all else in life, in the very shape and colour of life, and summoned me away. I had silenced all the voices, I had answered all the questions—I had come to her. And suddenly there was nothing but War and Death!"

I had an inspiration. "After all," I said, "it could have been only a dream."

"A dream!" he cried, flaming upon me, "a dream—when, even now——"

For the first time he became animated. A faint flush crept into his cheek. He raised his open hand and clenched it, and dropped it to his knee. He spoke, looking away from me, and for the rest of the time he looked away. "We are but phantoms," he said, "and the phantoms of phantoms, desires like cloud shadows and wills of straw that eddy in the wind; the days pass, use and wont carry us through as a train carries the shadow of its lights—so be it! But one thing is real and certain, one thing is no dreamstuff, but eternal and enduring. It is the centre of my life, and all other things about it are subordinate or altogether vain. I loved her, that woman of a dream. And she and I are dead together!

"A dream! How can it be a dream, when it has drenched a living life with unappeasable sorrow, when it makes all that I have lived for and cared for, worthless and unmeaning?

"Until that very moment when she was killed I believed we had still a chance of getting away," he said. "All through the night and morning that we sailed across the sea from Capri to Salerno, we talked of escape. We were full of hope, and it clung about us to the end, hope for the life together we should lead, out of it all, out of the battle and struggle, the wild and empty passions, the empty arbitrary 'thou shalt' and 'thou shalt not' of the world. We were uplifted, as though our quest was a holy thing, as though love for one another was a mission. . . .

"Even when from our boat we saw the fair face of that great rock Capri—already scarred and gashed by the gun emplacements and hiding-places that were to make it a fastness—we reckoned nothing of the imminent slaughter, though the fury of preparation hung about in puffs and clouds of dust at a hundred points amidst the grey; but, indeed, I made a text of that and talked. There, you know, was the rock, still beautiful for all its scars, with its countless windows and arches and ways, tier upon tier, for a thousand feet, a vast carving of grey, broken by vine-clad terraces and lemon and orange groves and masses of agave and prickly pear, and puffs of almond blossom. And out under the archway that is built over the Marina Piccola other boats were coming; and as we came round the cape and within sight of the mainland, another string of boats came into view, driving before the wind towards the south-west. In a little while a multitude

had come out, the remoter just specks of ultramarine in the shadow of the eastward cliff.

"'It is love and reason,' I said, 'fleeing from all this madness of war.'

"And though we presently saw a squadron of aeroplanes flying across the southern sky we did not heed it. There it was—a line of dots in the sky—and then more, dotting the south-eastern horizon, and then still more, until all that quarter of the sky was stippled with blue specks. Now they were all thin little strokes of blue, and now one and now a multitude would heel and catch the sun and become short flashes of light. They came, rising and falling and growing larger like some huge flight of gulls or rooks or such-like birds, moving with a marvellous uniformity, and ever as they drew nearer they spread over a greater width of sky. The southward wing flung itself in an arrow-headed cloud athwart the sun. And then suddenly they swept round to the eastward and streamed eastward, growing smaller and smaller and clearer and clearer again until they vanished from the sky. And after that we noted to the northward and very high Evesham's fighting machines hanging high over Naples like an evening swarm of gnats.

"It seemed to have no more to do with us than a flight of birds.

"Even the mutter of guns far away in the south-east seemed to us to signify nothing. . . .

"Each day, each dream after that, we were still exalted, still seeking that refuge where we might live and love. Fatigue had come upon us, pain and many distresses. For though we were dusty and stained by our toilsome tramping, and half starved and with the horror of the dead men we had seen and the flight of the peasants—for very soon a gust of fighting swept up the peninsula—with these things haunting our minds it still resulted only in a deepening resolution to escape. Oh, but she was brave and patient! She who had never faced hardship and exposure had courage for herself—and me. We went to and fro seeking an outlet, over a country all commandeered and ransacked by the gathering hosts of war. Always we went on foot. At first there were other fugitives, but we did not mingle with them. Some escaped northward, some were caught in the torrent of peasantry that swept along the main roads, many gave themselves into the hands of the soldiery and were sent northward. Many of the men were impressed. But we kept away from these things; we had brought no money to bribe a passage north, and I feared for my lady at the hands of these conscript crowds. We had landed at Salerno, and we had been turned back from Cava, and we had tried to cross towards Taranto by a pass over Monte Alburno, but we had been driven back for want of food, and so we had come down among the marshes by Pæstum

where those great temples stand alone. I had some vague idea that by Pæstum it might be possible to find a boat or something, and take once more to sea. And there it was the battle overtook us.

"A sort of soul-blindness had me. Plainly I could see that we were being hemmed in; that the great net of that giant Warfare had us in its toils. Many times we had seen the levies that had come down from the north going to and fro, and had come upon them in the distance amidst the mountains making ways for the ammunition and preparing the mounting of the guns. Once we fancied they had fired at us, taking us for spies—at any rate a shot had gone shuddering over us. Several times we had hidden in woods from hovering aeroplanes.

"But all these things do not matter now, these nights of flight and pain. . . . We were in an open place near those great temples at Pæstum at last, on a blank stony place dotted with spiky bushes, empty and desolate and so flat that a grove of eucalyptus far away showed to the feet of its stems. How I can see it! My lady was sitting down under a bush resting a little, for she was very weak and weary, and I was standing up watching to see if I could tell the distance of the firing that came and went. They were still, you know, fighting far from each other, with those terrible new weapons that had never before been used: guns that would carry beyond sight, and aeroplanes that would do—— What *they* would do no man could foretell.

"I knew that we were between the two armies, and that they drew together. I knew we were in danger, and that we could not stop there and rest!

"Though all these things were in my mind, they were in the background. They seemed to be affairs beyond our concern. Chiefly, I was thinking of my lady. An aching distress filled me. For the first time she had owned herself beaten and had fallen a-weeping. Behind me I could hear her sobbing, but I would not turn round to her because I knew she had need of weeping, and had held herself so far and so long for me. It was well, I thought, that she would weep and rest and then we would toil on again, for I had no inkling of the thing that hung so near. Even now I can see her as she sat there, her lovely hair upon her shoulder, can mark again the deepening hollow of her cheek.

"'If we had parted,' she said, 'if I had let you go.'

"'No,' said I. 'Even now, I do not repent. I will not repent; I made my choice, and I will hold on to the end.'

"And then——

"Overhead in the sky flashed something and burst, and all about us I heard the bullets making a noise like a handful of peas suddenly thrown. They chipped the stones about us, and whirled fragments from the bricks, and passed. . . ."

He put his hand to his mouth, and then moistened his lips.

"At the flash I had turned about. . . .

"You know—she stood up——

"She stood up, you know, and moved a step towards me——

"As though she wanted to reach me——

"And she had been shot through the heart."

He stopped and stared at me. I felt all that foolish incapacity an Englishman feels on such occasions. I met his eyes for a moment, and then stared out of the window. For a long space we kept silence. When at last I looked at him he was sitting back in his corner, his arms folded, and his teeth gnawing at his knuckles.

He bit his nail suddenly, and stared at it.

"I carried her," he said, "towards the temples, in my arms—as though it mattered. I don't know why. They seemed a sort of sanctuary, you know; they had lasted so long, I suppose.

"She must have died almost instantly. Only—I talked to her—all the way."

Silence again.

"I have seen those temples," I said abruptly, and indeed he had brought those still, sunlit arcades of worn sandstone very vividly before me.

"It was the brown one, the big brown one. I sat down on a fallen pillar and held her in my arms. . . . Silent after the first babble was over. And after a little while the lizards came out and ran about again, as though nothing unusual was going on, as though nothing had changed. . . . It was tremendously still there, the sun high and the shadows still; even the shadows of the weeds upon the entablature were still—in spite of the thudding and banging that went all about the sky.

"I seem to remember that the aeroplanes came up out of the south, and that the battle went away to the west. One aeroplane was struck, and overset and fell. I remember that—though it didn't interest me in the least. It didn't seem to signify. It was like a wounded gull, you know—flapping for a time in the water. I could see it down the aisle of the temple—a black thing in the bright blue water.

"Three or four times shells burst about the beach, and then that ceased. Each time that happened all the lizards scuttled in and hid for a space. That was all the mischief done, except that once a stray bullet gashed the stone hard by—made just a fresh bright surface.

"As the shadows grew longer, the stillness seemed greater.

"The curious thing," he remarked, with the manner of a man who makes a trivial conversation, "is that I didn't *think*—I didn't think at all. I sat with her in my arms amidst the stones—in a sort of lethargy—stagnant.

"And I don't remember waking up. I don't remember dressing that day. I know I found myself in my office, with my letters all slit open in front of me, and how I was struck by the absurdity of being there, seeing that in reality I was sitting, stunned, in that Pæstum Temple with a dead woman in my arms. I read my letters like a machine. I have forgotten what they were about."

He stopped, and there was a long silence.

Suddenly I perceived that we were running down the incline from Chalk Farm to Euston. I started at this passing of time. I turned on him with a brutal question, in the tone of "Now or never."

"And did you dream again?"

"Yes."

He seemed to force himself to finish. His voice was very low.

"Once more, and as it were only for a few instants. I seemed to have suddenly awakened out of a great apathy, to have risen into a sitting position, and the body lay there on the stones beside me. A gaunt body. Not her, you know. So soon—it was not her. . . .

"I may have heard voices. I do not know. Only I knew clearly that men were coming into the solitude and that that was a last outrage.

"I stood up and walked through the temple, and then there came into sight—first one man with a yellow face, dressed in a uniform of dirty white, trimmed with blue, and then several, climbing to the crest of the old wall of the vanished city, and crouching there. They were little bright figures in the sunlight, and there they hung, weapon in hand, peering cautiously before them.

"And further away I saw others and then more at another point in the wall. It was a long lax line of men in open order.

"Presently the man I had first seen stood up and shouted a command, and his men came tumbling down the wall and into the high weeds towards the temple. He scrambled down with them and led them. He came facing towards me, and when he saw me he stopped.

"At first I had watched these men with a mere curiosity, but when I had seen they meant to come to the temple I was moved to forbid them. I shouted to the officer.

"'You must not come here,' I cried, '*I* am here. I am here with my dead.'

"He stared, and then shouted a question back to me in some unknown tongue.

"I repeated what I had said.

"He shouted again, and I folded my arms and stood still. Presently he spoke to his men and came forward. He carried a drawn sword.

'I signed to him to keep away, but he continued to advance. I told him again very patiently and clearly: 'You must not come here. These are old temples and I am here with my dead.'

"Presently he was so close I could see his face clearly. It was a narrow face, with dull grey eyes, and a black moustache. He had a scar on his upper lip, and he was dirty and unshaven. He kept shouting unintelligible things, questions, perhaps, at me.

"I know now that he was afraid of me, but at the time that did not occur to me. As I tried to explain to him, he interrupted me in imperious tones, bidding me, I suppose, stand aside.

"He made to go past me, and I caught hold of him.

"I saw his face change at my grip.

"'You fool,' I cried. 'Don't you know? She is dead!'

"He started back. He looked at me with cruel eyes. I saw a sort of exultant resolve leap into them—delight. Then, suddenly, with a scowl, he swept his sword back—*so*—and thrust."

He stopped abruptly.

I became aware of a change in the rhythm of the train. The brakes lifted their voices and the carriage jarred and jerked. This present world insisted upon itself, became clamorous. I saw through the steamy window huge electric lights glaring down from tall masts upon a fog, saw rows of stationary empty carriages passing by; and then a signal-box, hoisting its constellation of green and red into the murky London twilight, marched after them. I looked again at his drawn features.

"He ran me through the heart. It was with a sort of astonishment—no fear, no pain—but just amazement, that I felt it pierce me, felt the sword drive home into my body. It didn't hurt, you know. It didn't hurt at all."

The yellow platform lights came into the field of view, passing first rapidly, then slowly, and at last stopping with a jerk. Dim shapes of men passed to and fro without.

"Euston!" cried a voice.

"Do you mean——"

"There was no paint, no sting or smart. Amazement and then darkness sweeping over everything. The hot, brutal face before me, the face of the man who had killed me, seemed to recede. It swept out of existence——"

"Euston!" clamoured the voices outside; "Euston!"

The carriage door opened admitting a flood of sound, and a porter stood regarding us. The sounds of doors slamming, and the hoof-clatter of cab-horses, and behind these things the featureless remote roar of the London cobble-stones, came to my ears. A truckload of lighted lamps blazed along the platform.

"A darkness, a flood of darkness that opened and spread and blotted out all things."

"Any luggage, sir?" said the porter.

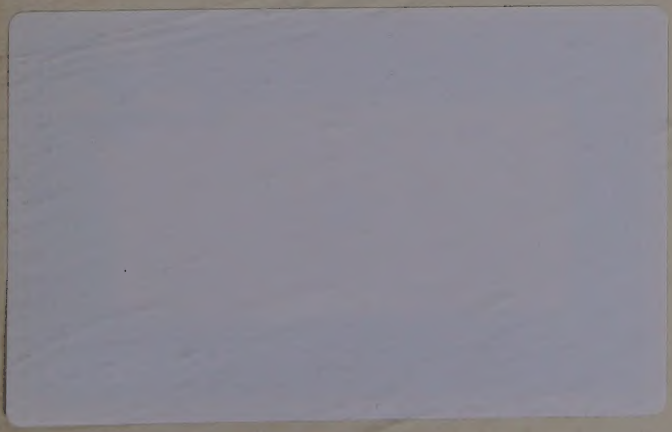
"And that was the end?" I asked.

He seemed to hesitate. Then, almost inaudibly, he answered, "*No.*"

"You mean?"

"I couldn't get to her. She was there on the other side of the temple—— And then——"

"Yes," I insisted. "Yes?"

"Nightmares," he cried; "nightmares indeed! My God! Great birds that fought and tore."

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